

# Admitted.

The Missing Guide To Craft A  
Winning Application & Study Abroad

SOUNDARYA BALASUBRAMANI





**Ramya Bhaskar**, *Founder of GiveMeFive.ai,  
Ex-Product Manager at BYJU'S*

What a wonderful read! *Admitted* will play as a guide for you by saving a great amount of money and time. It is filled with lighthearted humor and real-life references, which makes it a great read. The depth of research that Soundarya has gone through to write it is clearly visible and helps students “anticipate difficulty and prepare early” in their journey to study abroad!

**Vidya Srinivasan**, *Sr. Product Manager at Microsoft,  
General Chair at Grace Hopper Conference*

*Admitted* is an engaging and insightful must-read for students aspiring to study abroad. Soundarya does a phenomenal job of helping the readers time-travel through the journey they are about to take—from rationalizing if one should study abroad to getting the essentials in order before boarding the flight. *Admitted* is not a checklist found on the internet, but a practical guide equipping you with resources needed to ace every step of the admission process.

Soundarya's authentic style of writing, contextual references, and knack for teeing it up to the point in hand is bound to captivate you and make reading *Admitted* doubly joyful!

**Saiman Shetty**, *Einstein Visa Recipient,  
Founder at ResumePuppy, Graduate at Arizona State University*

Through *Admitted*, Soundarya hit the nail in its head on the topic of studying abroad. When I was on this journey, the resources were very sparse and it took *months* to search for every topic on my own. I love how Soundarya brought it all together in the book, giving you a good idea of what to expect and where to look for quality resources, thus converting *Admitted* into a handy mentor. As someone who hailed from a village in coastal Karnataka to Silicon Valley today, I can clearly see how such mentorship is extremely valuable!

**Shivani Srilakshmi**, *Program Manager at Salesforce,  
Graduate at Northeastern University*

*Admitted* reads like a handbook for every student who wants to take a leap of faith in wanting to study abroad. As a recent graduate, I found myself relating to most experiences in the book. Soundarya not only explains the why and how but cheers us on along the way to a greater meaning by accurately capturing the essence of a student's educational journey!

**Robert Adams**, *Founder at Chai & Coaching*

Soundarya's passion to learn, her immense curiosity, and her craft of writing have resulted in this beautiful book. *Admitted* will be the go-to resource for study abroad aspirants for many years to come. Rather than wasting your money on college counseling services, please invest your time reading and applying this incredible resource!

**Lakshmi Manoharan**, *Machine Learning Engineer at LinkedIn,  
Graduate at Stanford University*

*Admitted* goes beyond just stitching together several pieces in the studying abroad puzzle; it is interwoven with the author's personal anecdotes, tips, and recommendations that make this book an interesting read and a very valuable guide. It is simple, relatable, and has a refreshing tone, with the author sounding more like a mentor than an instructor. I wish I had as comprehensive a resource as *Admitted* while applying for my graduate school.

**Siddharth Chamorthy**, *Research Engineer at Quadrus Medical,  
Graduate at Columbia University*

*Admitted* forges the perfect path to a successful and competitive graduate school application. Soundarya has brilliantly used her personal experiences and vast knowledge in this field to put together a step-by-step, well-designed, dynamic guide that demystifies the daunting task of submitting your graduate school application. The author's writing style is highly commendable as it speaks to us, the readers, in a very descriptive and persuasive manner.



**Srivatsan Ramesh**, *Machine Learning Engineer at Tellus,  
Graduate at Columbia University*

Soundarya and team have covered the end-to-end aspect of a student's journey to get admitted. I never knew graduate life would be as challenging, demanding, and rewarding. Going back in time, I wish I had access to a book like *Admitted* to be mentally prepared for my journey. Having studied with Soundarya at Columbia, I can resonate with a lot of challenges we faced which you eventually will. This book will guide you in overcoming and being more prepared for those challenges.

**Harnoor Singh**, *YouTuber (Singh in USA),  
Graduate at Georgia State University*

Soundarya's book has changed the way I used to think about studying abroad. From every minute detail since her initial struggle in New York to a well-to-do personality, I can relate my entire study abroad journey to this book. I have tried making a few videos on studying abroad on my journey, but could never imagine or think about the idea of studying abroad to such a comprehensive level. Her book is not just a journey, but a lesson that teaches why, how, and what perspective one should have before taking off.

**Roshni Chellani**, *RF Engineer at Qualcomm,  
LinkedIn Influencer, Graduate at The University of Texas at Dallas*

My favorite part of *Admitted* is the way it is loaded with the latest information and infographics, which empowers the reader with quick tools to make informed career choices. Had I come across a book like this when I was planning to come to here, it would have given me a great sense of safety in the uncertainty that is presented by a new country. Not to mention the money I would have saved with consultancies! I highly recommend this book for anyone planning to study abroad. It will help you understand what to expect from the process and give you the tools to find what works best for you.

**Pritesh Jagani**, YouTuber (Yudi J),  
Graduate at California State University

I am personally not a reader of books, especially ones that are informational in nature. But *Admitted* stands out because of the engaging and informative way in which Soundarya has written it. I love the storytelling which adds a lot of flavor and relevance to the topic. I can relate 100% to what is written as I've gone through similar experiences myself. I highly recommend this book for anyone who is looking to study abroad. *Admitted* is going to be a life-saver and game-changer!

**Akshay Vasan**, Supply Chain Intern at Tesla,  
Graduate at Purdue University

*Admitted* takes you on the complete journey from deciding to study abroad till the time you land in your dream university. Soundarya shares insights and practices from her own experiences that will maximize your chances of standing out in your applications. The genius of the book lies in relating everyday life decisions that we take to established principles of psychology and neuroscience, thus teaching you how to think and form your own unique strategy that would work best for you.

**Aditya Kumar Aslesh**, Incoming Graduate at University of Pennsylvania

*I had a great deal of help from my friends and family for my application process, so I never realized how daunting it was to do it alone until I read this book. Admitted showed me why it is absolutely necessary to have someone (or something) to look to for advice. It helps you through every step of the application process! Going beyond that, it also helps you introspect, be professional, learn how to communicate, stay organized, and gives you a history lesson on many topics! It is a must-read for potential students who want to study abroad. Kudos to the authors for making this process educational and memorable!*

**Kaivalya Gandhi**, *Associate Product Manager at Verizon Media,  
Graduate at University of Waterloo*

Having studied outside of North America, I've read tons of college admission guides and test prep books to pursue my higher education goals. *Admitted* was by far the most authentic, relatable, and engaging guide I've come across. The thoughtful anecdotes, quirky illustrations, and actionable structure combine to provide a handy must-have companion for any student with aspirations to nail their journey to study abroad.

**Aatman Vora**, *Product Analyst at Egen,  
Graduate at Dartmouth College*

*Admitted* is a must-read for anyone who is considering pursuing education outside India. The best part is that this book serves as a one-stop source for any or all information needed to make your pursuit most effective. I wish I had access to a book like this three years ago! I would have definitely benefited from such a resource.

**Harshahn J P**, *Young India Fellow, Class of 2020*

*Admitted* successfully bridges the gap between expectations and reality of admission processes. Students of all ages will benefit from reading this book. The author has researched wide and deep so that the reader gets everything that will be needed and more from this book. I believe this book is a must-have for all students.

**Smitha Sridharan**, *Graduate at The University of Texas at Dallas*

This book addresses the several factors to consider, right from the moment you desire to pursue higher education abroad, all the way to picking your dream university from the choice of admits you have at hand. Aspirants should use this book as a tool to answer their questions, rather than expect answers from the book. *Admitted* will help you make an informed decision on whatever is the best option for you.

Some sample examples in this book are fictitious. Any resemblance to actual persons, living or dead, is coincidental.

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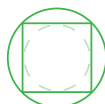
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First paperback edition August 2020

***Illustrated by Komal Telagavi***  
***Designed by Rishabh Singh, Komal Telagavi,***  
***and Keerthi Kumar***

ISBN: 978-81-94135-62-3



PractiSc Labs™

6-3-628/9, Hyderabad 500004, India

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*Average is that small temptation stopping you from doing what you should.*

*Genius is that little badass stopping you from becoming average.*

*Invoke that badass.*

# Table Of Contents

|                               |     |
|-------------------------------|-----|
| Author                        | i   |
| Team                          | ii  |
| Prologue                      | iii |
| Takeaways                     | iv  |
| Disclaimer                    | v   |
| Access To Resources And Slack | vi  |



## PART A: SETTING YOUR GOAL

|                                          |    |
|------------------------------------------|----|
| Chapter 1. Should You Even Study Abroad? | 01 |
| Chapter 2. Choosing The Major            | 23 |
| Chapter 3. Choosing The Universities     | 39 |
| Chapter 4. Building A Big Picture        | 67 |



## PART B: SUBMITTING THE APPLICATION

|                                                   |     |
|---------------------------------------------------|-----|
| Chapter 5. Preparing For Competitive Exams        | 71  |
| Chapter 6. Crafting Your Resumé                   | 101 |
| Chapter 7. Writing Your Statement Of Purpose      | 123 |
| Chapter 8. Getting Your Letters Of Recommendation | 153 |
| Chapter 9. Going The Extra Mile                   | 173 |

---

|                                 |     |
|---------------------------------|-----|
| Chapter 10. Hitting That Button | 195 |
|---------------------------------|-----|

---

 **PART C: REACHING YOUR GOAL**

|                                       |     |
|---------------------------------------|-----|
| Chapter 11. Applying For Scholarships | 199 |
|---------------------------------------|-----|

---

|                                      |     |
|--------------------------------------|-----|
| Chapter 12. Preparing For Interviews | 215 |
|--------------------------------------|-----|

---

|                                           |     |
|-------------------------------------------|-----|
| Chapter 13. Picking Your Dream University | 233 |
|-------------------------------------------|-----|

---

|                                      |     |
|--------------------------------------|-----|
| Chapter 14. Passing On The Gratitude | 249 |
|--------------------------------------|-----|

---

 **PART D: GETTING READY TO STUDY ABROAD**

|                                |     |
|--------------------------------|-----|
| Chapter 15. Securing Your Loan | 253 |
|--------------------------------|-----|

---

|                               |     |
|-------------------------------|-----|
| Chapter 16. Getting Your Visa | 277 |
|-------------------------------|-----|

---

|                                                  |     |
|--------------------------------------------------|-----|
| Chapter 17. LinkedIn, Networking, And E-Learning | 299 |
|--------------------------------------------------|-----|

---

|                              |     |
|------------------------------|-----|
| Chapter 18. All That Matters | 331 |
|------------------------------|-----|

---

|                     |     |
|---------------------|-----|
| Life At Grad School | vii |
|---------------------|-----|

---

|                  |      |
|------------------|------|
| Acknowledgements | viii |
|------------------|------|

---

|                |    |
|----------------|----|
| Spread The Joy | ix |
|----------------|----|

---

|          |   |
|----------|---|
| Appendix | x |
|----------|---|

---

|            |    |
|------------|----|
| References | xi |
|------------|----|

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**Soundarya  
Balasubramani**

Soundarya is currently an Associate Product Manager at Salesforce and a graduate from Columbia University, New York. She graduated in 2019 with a master's in Management Science and Engineering. Prior to that, she graduated as a Gold Medalist from NIT Trichy, India in 2017. She has been the recipient of more than a dozen scholarships and awards including S.N.Bose, DAAD, MITACS, J.N.Tata Endowment, K.C.Mahindra Education Trust, Cargill Global Scholarship, and more.

She has written more than 100 articles on the topics of education, technology, career, and life experiences. Her guides on internships, scholarships, and graduate school admissions have been viewed over 50,000 times. Her YouTube videos on life as a graduate student have been viewed over 900,000 times. Soundarya is also the founder of AIESEC at NIT Trichy, has served as the Chief Editor of The NIT Trichy Chronicle, and as Vice President of the Consulting Club at Columbia University.



TEAM

ii



Rishabh Singh graduated from Brown University with a bachelor’s in computer science. He is the founder and CEO of Gradly, a one-stop shop for pre-arrival needs (loans & health insurance) for international students moving to the U.S.



Saikishore Raju is a graduate student at Dartmouth College with a bachelor’s degree from NIT Trichy. He got admits from all 7 universities he applied to. He’s also an Advanced Communicator at Toastmasters International, where he has delivered over 50 speeches and chartered two clubs.



Komal Telagavi is a fourth year architecture student at NIT Trichy. She has three years of experience as a graphic designer and has served as the Design Editor at Feeds—NIT Trichy’s official magazine and media house.



Nidhish Rajan is a Product Marketer at Zoho and an MBA graduate from Sri Sathya Sai Institute of Higher Learning, Puttaparthi. He has six years of experience, having worked in sales, content marketing, and digital media planning.



Karthikeyan Eswaran is an Associate Consultant at Capgemini and graduated with a bachelor’s from NIT Trichy. He is a voracious reader of fantasy novels and has edited works by over a dozen writers and poets.

# Prologue

It's hard to believe this now, but this project began when I wanted to create a ten page document that compiled the articles I had written over the years on graduate school, internships, and scholarships. I approached Sai on December 27th, 2019 asking if he would be interested in helping me compile it all. A lot of us begin with grand goals in life and set out to achieve them by slowly climbing the skill ladder. This project was quite the opposite. As we explored further into the topic, we soon realized the need for an all-encompassing guide for students aspiring to study abroad.

Komal was the first to join the team after a brief interview process. Back then, I wanted to work with a designer just to create a cover page and a few character sketches inside. However, as you leaf through the pages now, you will realize it became much bigger than that. Rishabh joined the team to work on a few chapters after a phone call got us wondering how his experience with Gradly can be put to use. He also ended up setting the design system for the book. Karthik joined in the last month serendipitously and became the editor for the book, whereas Keerthi (whose name you see on the back cover) joined to help us compile the book. Finally, Nidhish helped us all get this to your hands right now.

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This project began with a modest goal and gained momentum with more effort and people over a span of seven months.

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I knew we were creating something of value after writing three chapters of the book. Not because we had expert knowledge on the topic, but because we had been through the process and knew where the pitfalls were. The benefit you get from hindsight is invaluable. If our ancestors hadn't scribbled on cave walls helping their progeny differentiate an edible berry from a poisonous one, the course of history might just have changed. We

soon realized while writing the book that this was as much an opportunity to talk about the mistakes we made as it was about the things we did right.



Most of us spend our childhood swimming within the confines of a narrow brook where the boundaries are set by our parents at home and our teachers at school. When we enter college after twelfth grade, we are let into a small pond and given the freedom to meander on our own for the first time. So we begin wandering. We slowly start collecting tools by attending classes and passing exams. Not all tools excite us the same; and not all tools are as valuable as others. Nevertheless, they all go into the box. After four years, we have two choices. We can either open the box and begin using them to solve the world's problems *or* we can study further. Now, why would you study further?

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Perhaps you want to collect more of a specific type of tool.

Perhaps you don't want to just collect tools; rather, you want to *create* them.

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This is where you begin to think about graduate school. A master's degree lets you collect more specialized tools, and simultaneously use some of them to solve a problem of your choice. A doctoral degree also lets you collect more specialized tools. However, it doesn't end there. You are

pushed to the frontiers of the human colossus and tasked with doing something that no one else has dared to before. You are tasked with *creating* new tools. While they have their differences, both the degrees require you to find a domain that deeply interests you.

In this book, we kept our primary target audience to be the students who wish to pursue their master's in the United States, since that is where we have anecdotal expertise. It would be pretentious of us to state that this book can be equally useful to an aspiring doctorate or to someone who wishes to pursue their studies somewhere apart from the U.S. (perhaps Canada or Germany). However, it would also be naïve of us to state it wouldn't help at all. If you're an aspiring doctoral candidate, our advice would be to read this as a *supplementary* resource to something that is targeted to you. And if you wish to study in another country, take note of the instances where we mention the U.S. and assess if the value of the message is lessened by it. If so, look for supplemental resources.

As a final note, we don't want you to read this in one sitting.

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Read every chapter as you experience it in your life.

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Or, jump to the chapter that you need help with the most. The content in the book is all about *taking action*. We have included examples throughout and given you access to a folder that has valuable resources which will come in handy throughout this process. Specifically, take note of the over 500 links present under *References*, which will lead you to all corners of the internet where you can find more guidance. It might feel overwhelming at times, but don't worry yourself thinking you need to follow every single piece of advice given. That would be wonderful for us to hear, but it is up to you to pick and choose the guidance you feel applies best to your scenario.

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Submitting a strong application to graduate school involves a plethora of factors. We tried our best to address it all in 350 pages.

Dive in with curiosity. This will be a long ride.

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This book is my brainchild. I'm not lying when I say that I *thoroughly* enjoyed writing, and re-writing, every word of it. However, you will notice that I have used the pronoun *we* throughout, except for instances where I share a personal story. This is because this book was a collaborative initiative and I could not have written it without a strong team that I could lean on throughout.

This began as a ten day stint, and ended up consuming more than half a year of my life.

## Takeaways

Imagine this book to sit somewhere in between your loved ones who want the best for you but aren't holding your hand at each step of the process, and the education consulting firms that are willing to do all your work in exchange for quite a lot of money.

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We won't tell you how to structure your statement of purpose down to each word. We also won't let you go with a simple *you can do it!* vote of confidence. We like to stay in the middle.

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In each chapter, you will encounter topics that are directly relevant to your journey. Each chapter will walk you through the process and provide all the resources needed for you to get to the finish line. Those resources also include sample templates of various components: how to send emails asking for a recommendation letter, what a two-column resume should look like, what should go into writing an essay on diversity, and more. To top it all off, the design elements will provide a visual hierarchy to help emphasize certain points, capture your thought process, and provide a sense of levity in an otherwise densely packed book full of value.



The following are the top ten takeaways you can expect as you leaf through the final pages of the book:

1. Resources and the right dose of guidance needed to finish each part of your application: crafting a resume, writing your statement of purpose, getting your recommendations, making a video proposal, and preparing for interviews.
2. Resources required and the approach to take to ace GRE, TOEFL, IELTS, and other standardized exams.
3. An objective and holistic way to narrow down universities *and* pick your dream university from multiple admits, based on factors you care about.
4. Lesser-known information on the topics of getting your loan and visa along with critical do's and don'ts.
5. An external drive accessed through a special link containing a custom tracker (titled *Dream Tracker*) built using Google Sheets, sample resumes, sample SOPs, and other useful information related to loans and visas added over time.
6. A *References* document containing more than 400 external links that provide supplemental guidance from around the internet.
7. A list of 30 scholarships to apply to along with resources to find more yourself.
8. Testimonials from past graduates on a unique approach they took to accomplish specific tasks in the journey.
9. Interesting pieces of history, psychology, and behavioral economics wherever relevant.
10. Last but not the least, a boatload of encouragement to get you to your dream university!

## Disclaimer

There are a few things we want to mention as disclaimers before you begin:

**First**, *none* of the advice present in this book related to immigration and visas should be taken as legal advice. We are *not* attorneys. We have only given advice based on our personal experiences. Please consult a lawyer if you need professional advice.

**Second**, given how rapidly things are changing due to the pandemic, please use the official government website for the latest news and updates related to immigration and visas. The information present in the book is up-to-date only at the time of writing.

**Finally**, to improve your reading experience, we have added six legends throughout the book to signify different kinds of information. Below is the description of the six legends:



Refers to facts, data, and statistics



Refers to novel ideas and concepts



Refers to warnings and things to watch out for



Refers to the author's personal stories



Refers to *thinking*. Pause and think when you see this



Refers to *action*. Pause and take action when you see this



## Access To Resources And Slack



Please don't skip this page.

### RESOURCES

We have referenced a *Resources* drive throughout the book, containing high-quality sample SOPs, sample resumes, a custom-built *Dream Tracker*, list of scholarships, references, and more. To get access to the drive, please visit the link or QR code below and enter your email address and Amazon order number (or your RazorPay payment ID if you had pre-ordered).

**[goto.admittedthebook.com/resources](https://goto.admittedthebook.com/resources)**



We curated the resources present in that folder *specifically* for you, someone who paid money to buy the book and is planning to spend time reading it.

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We hope you will honor that and not share it widely.

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### SLACK COMMUNITY

A #Slack community was created for those who became an early supporter by pre-ordering the book. If you aren't a part of it, you'll get an invite soon!

As mentioned earlier, once you use the link to submit your email address and receipt, you can expect an invitation sent to you soon.

For any questions on this, please contact [support@admittedthebook.com](mailto:support@admittedthebook.com).

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Now, the time has to finally begin reading the book!

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# Chapter 01

## SHOULD YOU EVEN STUDY ABROAD?

Time to take a step back  
and re-evaluate your goals



“ *A major life decision is never a choice but rather a realization that the decision has already been made.* ”

- Doug Cooper

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Can you think back to the moment you made the decision to study abroad?

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I remember a lot of trivial moments from my life. The first time I had gelato, I was in a yellow and black checkered shirt roaming the streets of downtown Seattle at night. I remember the neon sign outside the store, the name of the store owner, and even the witty comments he made. However, I don't remember the moment I decided to study abroad. It feels as though I have always wanted to. Now it's hard to imagine a moment when studying abroad was *not* my aim.

The big decisions in life are never made in a single moment. They are akin to a plant growing below the surface of a pond, that emerges to be seen by the naked eye when the decision is finally made. Yet, it possibly took months, or even years, to slowly grow with experiences and mistakes. Deciding to study abroad is one of the more important decisions you will be making in your life. In fact, it is a privilege that students did not have, just a century ago.



Glad you asked! The history of international education is a long, yet sparse, one<sup>[1]</sup>. For the first 800 odd years, there weren't many significant events. The coveted title of *the first person to study abroad* is attributed to *Emo of Friseland*, a Frision scholar supposedly from the Netherlands who studied at Oxford

University, England in 1190. Knowingly or unknowingly, he paved the way for international education in Europe (and interestingly has a Facebook page<sup>[2]</sup>). Fast forward about 600 years to 1792, the French educator Marc-Antoine Jullien<sup>[3]</sup> wrote to Louis XVI, asking him to institute a worldwide association for education composed of organizations from various European states. His wishes finally came true in 1952 at the World Fair in London<sup>[4]</sup> where representatives from the United States, Germany, and France met to discuss the possibility of an international education organization.

Over the next few decades, there was a slow but sure proliferation of students who traveled afar for brief summer programs. Although World War I and II were the epitome of international conflict, the aftermath of both helped highlight the importance of international education. In 1919, the Institute of International Education (IIE) was established and in 1923, America's first officially credited study abroad program was launched at the University of Delaware<sup>[5]</sup>. Policy makers and leaders suddenly turned to this practice as a way to restore global peace, by exposing young students to international culture.

President Franklin D. Roosevelt famously said that *"a nation, like a person, has a mind—a mind that must be kept informed and alert, that must know itself, that understands the hopes and needs of its neighbors—all the other nations that live within the narrowing circle of the world."* His ideologies helped in the establishment of the Fulbright Program by Senator William Fulbright in 1946<sup>[6]</sup>. Since the 1950s, the number of international students in the U.S. has grown steadily from 26,000 to almost 1.1 million in the 2018-19 academic year<sup>[7]</sup>. Out of the 1.1 million, over 200,000 students were from India<sup>[8]</sup>.

What began as a single man's quest to study in a neighboring country for reasons unknown, has now become a childhood dream for millions of students around the world.

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Does that include you?

We want to help you answer that in this chapter.

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There are many myths around graduate school and the notion of studying abroad. Too often, students leave their home country only to be disappointed or disillusioned with the state of affairs in the new country. When you leave your home country, you don't just leave the physical landscape. You are also expected to leave behind the ethos and etiquettes that you learnt over the last two decades. At the very least, you are expected to learn a new set of them which in many cases will tend to contradict your previous experiences.

We could write pages just on the differences in day-to-day experience for someone who walks on the left versus someone who walks on the right<sup>[9]</sup>. To give a well-known example, it is very common for a stranger to ask you about your day when you walk the streets of America. People tend to be comfortable with, and even *like*, small talk in this country. Yet, it is rare to experience that level of superficial bonhomie in India. On the flip side, we have heard (and experienced) on countless occasions that it takes a longer time to make a long-lasting connection with someone in America than with someone in India, or your home country.

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Is one better than the other? There is no easy or right answer.

There is only a choice to be made.

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With this book, we want to help you with your graduate school application process, but *only* if that is something you have decided upon after careful consideration. By the end of this chapter, you will either have a stronger conviction towards your goal of studying abroad, or realize that you were trying to use the notion of studying abroad as a facade for another unrelated goal. If it is the former, we sincerely hope the rest of the book helps you in your journey. If it turns out to be the latter, know that you saved yourself

thousands of dollars and dozens of hours writing essays and applications.

Either way, it's a win-win.

## REASONS TO STUDY ABROAD

There are many reasons to pursue graduate studies abroad. You might want to earn a lot of money, learn new concepts, settle down over there, or just meet a diverse set of people. Whatever the reason might be, it all comes down to the following question: *are you prepared to face the other side of the coin?*

We'll go through a few reasons where it's worth pointing out the other side, and make you think harder about your decision.



We all seek prosperity in our career. For good reason. There are various studies<sup>[10]</sup> that draw out the correlation between money and happiness. A study conducted at Princeton University<sup>[11]</sup> broke down happiness into two parts: emotional well-being and life evaluation. The former refers to the quality of someone's daily life—a measure of how often one experienced joy, anger, stress, and affection the *previous* day. The latter alludes to a more zoomed out perspective of how one evaluates their whole life when asked how satisfied they were. The results found a strong correlation between money and emotional well-being *until* a threshold of \$75,000 is hit. Beyond that, more annual income did not necessarily equate to more day-to-day happiness. However, there was still a correlation between money and overall life satisfaction.

While wanting to earn is a natural human instinct, let's look at the cost you

are putting in to get to this goal. The average tuition fee of a master's degree could range from \$30,000 all the way to \$120,000<sup>[12]</sup>, if you plan on pursuing an MBA. The range is so wide since it depends on numerous factors concerning the university: public vs private, in-state vs out-of-state, location, and so on. Taking the average to be \$50,000, that amounts to a little over 35,00,000 INR (using the average exchange rate from 2019<sup>[13]</sup>). Now, let's add to this the cost for housing, healthcare, food, books, travel, and other activities. Assuming all of this comes to \$800 per month, that amounts to almost \$20,000 for 24 months. Finally, there are the pre-admit costs involved including fees for GRE (\$205) and TOEFL (\$180) exams, applications, and visas (~\$350)<sup>[14]</sup> which could amount to \$1500, assuming you submit eight applications with a \$75 application fee per university.



Adding it all up, the average cost for pursuing a master's degree abroad ends up at **\$71,000 — or almost 52,00,000 INR.**

Another critical piece of information commonly discounted by students is the opportunity cost in pursuing a master's degree. Apart from spending thousands of dollars, you also forego income that you would have otherwise earned by working in the two years you pursued your master's degree, which could add another 10,00,000 INR to the estimate above<sup>[15]</sup>.

It's not all bad news though. Pursuing your graduate school abroad *will* help you secure jobs with a higher salary compared to a student with a bachelor's degree. In fact, the data shows that the jump in your market value as a potential employee increases proportionately to give you a great potential return on your investment. The more qualified (by level of education, such as bachelor's or master's) you are, the higher the increase in your expected salary.





Based on the 2018 salary data from the United States Department of Labor, a worker with a bachelor's degree earned a median weekly salary of \$1,198 whereas **someone with a master's degree earned \$1,434, an almost 20% increase.**

This percentage increase also seemed to vary greatly between majors, ranging from a mere 2.5% for a degree in journalism all the way to 24% for a degree in computer science<sup>[16]</sup>. For someone with a doctoral degree, the median weekly salary was \$1,825, a 52% increase over the bachelors' salary.

You can also offset the cost through scholarships, part-time jobs, and assistantships (which we'll get to in Chapter 11) .

Pursuing higher education abroad clearly has its merits. It improves your market value without a doubt. What we don't want you to forget are the costs involved in the process of getting there. Assuming you earn \$80,000 after graduating with a master's degree, it might take you between three to ten years to pay back your education loan, depending on how much you manage to save every year.



When you calculate expected salary, don't forget to take into account the taxes you would incur at the federal and state level, which can add up to a sizable amount, **between 15% to 25%**<sup>[17]</sup>, pretty quickly.



Fair enough. We can resonate with that sentiment. However, there is an important bridge that connects your dream of studying in a country to settling down over there.

That bridge is called *jobs*.

Only a handful of universities in the U.S. boast a close to 100% placement rate. Even the ones that have high numbers have them because of the way they calculate it. Rather than looking at the percentage of students who got a job before the end of their graduate school, they might calculate the percentage of students who got one within three months *after* graduating<sup>[18]</sup>, since that is the buffer period you get before you have to leave the country. A survey of over 1000 student alumni by the World Education Services<sup>[19]</sup> found that only 33% were employed before completing their graduation, but this increased to 87% within six months.



The National Association of Colleges and Employers' 2018 Job Outlook report<sup>[20]</sup> found that only 23.4% of employers who responded mentioned that they're open to hiring international students, a **4.1% decrease from the previous year.**

The good news is that most of the top tech firms you hear about *do* recruit international students, which makes up a sizable portion.

One of the biggest—and less cited—challenges in finding a job, is the lack of contextual cultural knowledge that one needs to form connections in a

foreign country. In India, it is a common occurrence to see companies visiting universities to recruit a predetermined number of students. The student's task here is to prepare for the interview and show up on time on the day. In the U.S., it's a little more complicated. There is a heavier weight placed on networking with employees and attending career fairs to first secure an interview, before you can prepare for it.

Until I came here, I never cared to reach out to people actively on LinkedIn to request time for a *coffee* chat. I didn't have to walk up to strangers in events and ask about their job, hoping to get their email address. Or worse, stand in a room of 500 during a career fair and wonder anxiously how to make myself stand out. In the end, all those experiences helped tremendously. I just wish I had known about the culture shock<sup>[21]</sup>.

Finally, even if you end up getting an offer and your employer is willing to sponsor your H-1B visa, your name needs to be picked in the lottery. The WES report quotes that<sup>[19]</sup>, *"Across the board, from enrollment to professional contexts after graduation, international respondents still in the U.S. reported that work authorization was, alongside the effort to forge professional connections, their biggest challenge."*



## ETCH, ONE, BEE

For those unaware, H-1B is a type of **nonimmigrant visa** awarded to those who graduate with a bachelor's degree or higher and end up in specialty occupations in fields such as engineering, medicine, architecture, science, accounting, and more. Every fiscal year, the United States makes 85,000 such visas available. However, since the year 2013, the number of applications has exceeded the number of slots<sup>[22]</sup>, leading to a lottery system where the chance of your name getting picked is decided by mathematics. In the year 2020, over 275,000 applications were received for the 85,000 slots.



Not exactly. These 85,000 slots are split into 65,000 and 20,000. The advantage for master's and doctoral candidates is that the 20,000 pool is reserved *only* for them, and cannot be consumed by those who graduated with a bachelor's.

One piece of good news came from the Department of Homeland Security on January 31st, 2019<sup>[23]</sup> when they announced that the order of the names getting picked will be reversed. Previously, applicants with an advanced degree were first picked for the 20,000 pool and those who did not get picked were added with the rest of the bachelor's applicants to be picked in the 65,000 pool. With this change, the order has been reversed. Now, everyone is entered into the pool for the 65,000 slots first. Among those not picked, applicants with an advanced degree get a second chance in the 20,000 pool.

USCIS estimates that *"reversing the order that the lottery takes place should result in approximately 16 percent more lottery numbers going to eligible candidates with the U.S. master's degree."*<sup>[24]</sup>



Based on a quick back-of-the-envelope calculation, we discovered that this increased the chances for an advanced degree candidate to be picked from **51% to 55% in 2019**. Not too bad.

Tying all this together, if there was one piece of advice I wish someone had given me before I came to the U.S., it was the following:

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Anticipate difficulty and prepare early.

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Some students think the hardest part of the journey is over when they get the admit. They delude themselves into the false expectation that as long as they're studying in a university that is well-recognized, things will fall in place organically. This delusion is broken within the first few months of arriving. We say this from personal experience as well. There is just so much more demand than supply for jobs.

So go abroad with the expectation that it *will* be a difficult journey before you get to settle down.

But also an equally rewarding one.



Talk to any agricultural expert, and they will tell you how important fertilizer is to the yield of a crop, which in turn yields high returns. Yet, historical data will show you that the usage of fertilizers have always stayed lower in Africa compared to Asia, leading to greater agricultural yields in Asia. The solution seems simple, right? The governments simply need to give away the fertilizer for free or heavily subsidize its cost so everyone has access to it.

In fact, Stephen Carr, a former World Bank specialist on Sub-Saharan African agriculture quoted, *"The rest of the world is fed because of the use of good seed and inorganic fertilizer. This technology has not been used in most of Africa. The only way you can help farmers get access to it is give it away for free or subsidize it heavily."* Seems pretty consistent with what one would think is the panacea here. And that's exactly what many governments did. In India, for example,

fertilizer subsidies amounted to 0.75 percent of GDP between 1999-2000. In Zambia, the subsidies consumed almost 2 percent of the government's budget<sup>[25]</sup>.

Yet, in western Kenya, simply giving away fertilizer for free or under heavy subsidy did not solve the problem completely, nor was it economically sustainable. Farmers tended to use too much fertilizer leading to a low yield of the crop. In some cases, they purchased it only to resell and make a profit. Rather, the solution that seemed to work better and also be economically cheaper involved three steps:

- ▶ Doling out a small subsidy on fertilizers for a limited time period right after the harvest season
- ▶ Delivering it for free
- ▶ Educating the farmers on the importance of using fertilizers

---

Why did this solution work?  
*Because it tackled the right problem.*

---

The farmers, to an extent, *did* understand the value of using fertilizer to improve their yield. They also knew of the subsidies given out by their government. By any rational estimate, one would assume that all the farmers would take advantage of it. However, they did not. The real issue fell in the domain of psychology. It had to do with the fact that they procrastinated purchasing the fertilizer throughout the season, and in the end, when time was limited, the utility cost of going to the store and purchasing it seemed high enough that they became impatient and abandoned the idea altogether. This was exacerbated when they did not have enough money to purchase it at the very end of a post-harvest season and weren't aware of all the benefits it provided.

The real problem wasn't just the lack of money. It was a combination of a lack of money, appropriate education, and much-needed motivation. Hence the limited time subsidies with a free delivery and education solved the problem in a manner that was economical in the long term.

More often than not, not liking your job or environment is not the problem itself, but is rather a *symptom* of a problem that is yet unknown.

## PUT YOUR INVESTIGATOR'S HAT ON

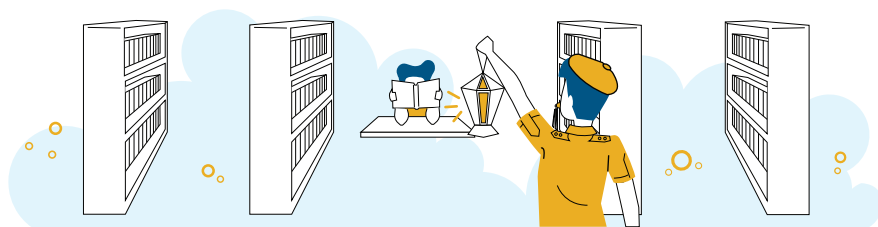
Understanding the root cause of unhappiness has been the topic of countless articles around the internet<sup>[26]</sup>, so reading a few will begin to give you an idea not of the answer, but rather the questions you can ask yourself to arrive at the right answer. Famous computer scientist Alan Kay said it best: “*A change of perspective is worth 80 IQ points.*”

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The most serious mistakes are not made as a result of wrong answers. Rather, they are a consequence of asking the wrong questions.

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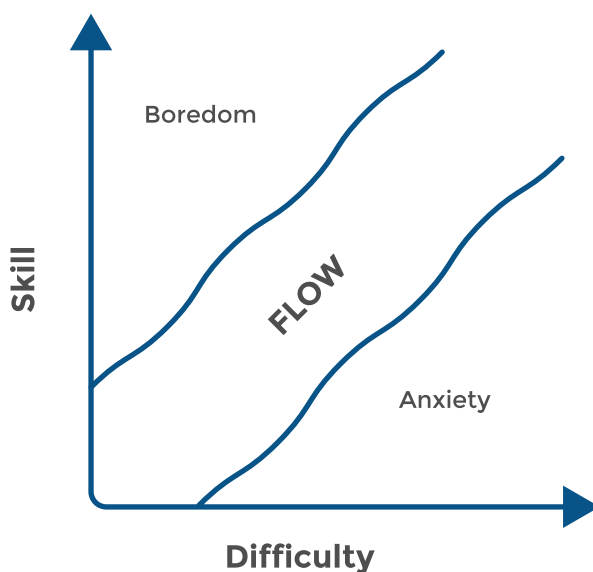
One of the more influential books I've read in my life is *The Flow*<sup>[27]</sup> by Mihaly Csikszentmihalyi (pronounced me-high cheek-sent-me-high), a renowned Hungarian-American psychologist who invented the concept of *flow*. Mihaly describes flow as “*a state in which people are so involved in an activity that nothing else seems to matter; the experience is so enjoyable that people will continue to do it even at great cost, for the sheer sake of doing it.*”



He bottles 25 years' worth of research on happiness into the 300 pages where you will find quotes from writers, violinists, mountaineers, and basketball players describing their experiences when they engage in activities in their field. One of my favorite quotes from the book is the following:

“ *Flow is a loss of self-consciousness. [This] does not involve a loss of the self, and certainly not a loss of consciousness, but rather, only a loss of consciousness of the self.* ”

In the book, he also plots what has now become a famous chart, known as, you guessed it, *The Flow Chart*.



It is a simplistic plot of skill vs difficulty in accomplishing a task. If you are just beginning to play tennis and decide to compete against a veteran player, you will lose the game as well as your motivation to learn it further. You will continue to doubt your abilities and enter a state of anxiety, which is detrimental. However, if *you* are the veteran player and you keep competing against players who still have a long way to go to match your skill, you will enter a state of complacency, and eventually boredom, since the activity will



not excite you anymore. Neither are helpful for long-term happiness.

Mihaly posits that in an ideal scenario, you will remain in that narrow state of flow. How do you do it? By taking up tasks that are challenging yet achievable if you put in enough effort. Eventually, you will be more skilled, and take up tasks that are more challenging. This way, you will be in a state of flow by moving both horizontally and vertically, but not so much as to leave this state altogether.

How would you know if you're in that state? Like all good questions, there is no easy answer to that. You need to read about others' experience, and compare it against yours.

Do you feel like quitting because your job isn't challenging? Or because you don't see yourself forming a lasting bond with your co-workers? Could it be that you are just having a bad week? Understanding the root cause is in no way a simple problem. And attaining a lifelong sense of fulfilment doesn't happen by default to some. You need to work towards it by making necessary changes to your life and observing your response to those changes.

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The best things in life aren't free, after all. They are obtained through an exhausting and exhilarating journey.

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The *flow* is just one of the many concepts out there, such as the five whys<sup>[28]</sup>, that you can utilize to figure out the source of your problem. If it turns out that you are indeed unhappy with your job because you yearn for the academic environment where intense learning happens everyday and wish to study in a strange new country, then by all means, we're rooting for you!



## DAY 1: THE BIG APPLE

The first day I landed in New York was probably one of my saddest days at Columbia University. I landed at 9 AM in the John F. Kennedy airport, after a 25 hour long flight with a moderate fever. I was travelling internationally for the second time in my life. The first time was when I came to the U.S. through a summer scholarship. I had spoken to a lot of people that I was about to meet during the day over WhatsApp, in the two months leading up to this day. We had, as I'm sure you will soon, a lively group where questions were asked and answered every few hours. We also had a separate group just to engage in innocent chitchat. As soon as I entered my apartment, which in itself was difficult to find at first, I was greeted by my two roommates who had arrived earlier. We met through WhatsApp. Within the next hour, I was whisked off after a quick bite to spend the entire day outdoors with a dozen others, traveling to Staten Island, Times Square, and more places that I don't remember now.

It was a strange feeling. Being an introvert, speaking to someone over text messages was something I had mastered. However, meeting them in person and spending an entire day with a group of people who I had known for two months, yet did not really know at all, was really hard. I felt completely out of place and wanted to get home quickly. After roaming for ten hours, I decided to give in to my intense fatigue and return home sooner, and left the group to travel by myself through the subway at 11 PM. Even on a good day, I wasn't good with

directions. So you can imagine it was only likely that I ended up at the wrong destination, many blocks away from my home, in a location called Harlem. A location popular for its crime rate.

Add to this a dead phone and chilly night. With only a vague knowledge of my address, I began running in a direction that seemed right, constantly keeping an eye out for muggers and rogues. There seemed to be many that night, thanks to my vivid imagination. Fortunately, I finally reached home a little past midnight and spent the next two hours sobbing uncontrollably, wishing I had never come to this strange new country.



Of course, if that was the end of the story, I wouldn't be writing this book right now enthusiastically helping you to study abroad. I only say this so you can be prepared for such experiences; experiences that push you so far out of your comfort zone that your comfort zone's radius increases. If I move forward sixteen months to the last day I spent at Columbia, I was still sobbing uncontrollably, but for all the right reasons. Many of those that I met on the first day went on to become my friends, along with others I met in the period in between. I had a lot of firsts at Columbia, and in New York. Apart from finding my passion in becoming a Product Manager and writer, I also learned to be more fearless and outgoing from my time as a graduate student.

Graduate school in a new country will not be merciful. You *will* feel homesick. You will carry an imposter syndrome on your shoulders a lot of the time. Your perseverance will be tested to its limits. You might feel out of place a lot. However, you will also form lasting bonds in a short period of time. You will

meet people who will take your breath away with their intelligence. You might experience your 2 AM karaoke sessions for the first time. Embarrass yourself in public but not really care because really, no one else does. Sit in classes taught by professors who are among the most distinguished in their field. And professors who breathe life into the topics they teach.

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You will experience freedom in a way you haven't before.

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In my case, for the first time, I learned what it felt like to walk home at 4 AM every night from the library, after studying and working for hours on end. That was a privilege I did not have during my bachelor's due to the gross gender discriminatory policies followed in many universities in India and elsewhere. People misconstrue freedom with irresponsibility. I know from my experience that it's the other way round. You will learn to be *much more* responsible, since there is no one to take care of your daily needs anymore. And finally, when you get your job or internship offer, you will experience a deep sense of relief that is reserved only for those who have worked really hard.

So the question you need to ask yourself is: *does the good outweigh the bad?* Studying abroad is neither rosy nor dreadful. It has its fair share of ups and downs from which you will learn regardless of the expectations you set for yourself. However, it is a big decision that needs to be taken after careful consideration for all the reasons stated above: it costs a lot of money, puts you under immense pressure, and has no guaranteed return on investment.

If after reading all this you feel like this isn't aligned with your goal, or now is not the best time to study further in a new country, let us assure you that you saved yourself a fortune in both money and time.

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One of the hardest feats to achieve as you grow up and surround yourself with many opportunities is the ability to say *no*. Something even harder is standing up to the voices around you and shutting them out when needed.

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Although we're sorry you spent the money to buy this book, you can always give it to someone else who needs it. On the other hand, if this is aligned well with your goal, then by all means, keep reading!

## THE BALLAD OF OLD MAN PETERS

Since this book is aimed at educating you on how you can become more educated, it felt fitting that we share a story on the quest for education before we dive into the crux of it. I read this short-story in the summer of 2019, when I was devouring many books on creative non-fiction. In a true story titled *The Ballad of Old Man Peters*<sup>[29]</sup>, Jon Franklin, a two-time Pulitzer prize winning author, recounts the life of an old man named Wilk Peters who spent his life chasing knowledge and fleeing ignorance.

Wilk was born in 1900 in Trinity County, Texas, to John and Martha Peters. The 1900s were a period when racism plagued America. At the age of eight, he had six other siblings to take care of, and was an agricultural laborer walking a plow mule. Yet, he knew he wanted more.

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His parents, though not educated beyond grammar school, knew the path to emancipation was through education.

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Wilk's gift from his father was not a worn out tractor or a five acre farm; it was the dream that Wilk would become a doctor someday. He clutched onto that dream, intangible at times, and it kept him going when his father passed away, followed by his youngest sister. When he turned 18, he decided to

finally move away from his family towards his quest for education.



As you leaf through the pages of this inspiring—and at times melancholic—story, you will realize the lengths to which someone can go, and has gone, to seek education. One of my favorite passages from the story alludes to the day Wilk finally stepped into a classroom.

“Wilk found himself, at age 23, a full-grown man with calloused hands and hardened muscles, sitting with his knees jammed under a tiny desk, wrestling with long division, surrounded by prepubescent sixth-graders. The effect was not what the admission officials had predicted. Wilk viewed his place in class as opportunity, not insult. If the children laughed at him he didn’t notice, preoccupied as he was with the serious business of fractions, with the parsing of sentences and the memorization of poetry.”

Too often, we forget the wonders around us. Just by being able to read this book, this *passage*, you have proven to be luckier than half of the earth’s population, being able to see, read, and comprehend the meaning of these words. As you try to seek further education, do not forget the privilege you enjoy in being a curious soul.

As for Wilk? He went on to become a librarian, standing at the gates of knowledge everyday and guarding them so future generations could reap the benefits. He also found his love for traveling, and flew to fifty six countries (that he could remember), and learnt German, French, Russian, Italian,

Spanish, and so much more. He did not become a doctor like his father dreamed of.

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But, he became an educated man.

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## CONCLUSION

Re-read this chapter if you can. Spending a few more minutes now will save you heaps of time later when you look back with troubling doubts. Many of the students who leave their home country to pursue education abroad do not return, at least for a period of 5-10 years. That's more than enough time for a lot of significant changes to take place in your life. If you were planning to leave your home country and study abroad primarily because you wanted to earn more, obtain a better social status, or dislike your current job (and situation), we ask you to think again.

There are struggles associated with the transition that cannot be anticipated until you get here (or wherever you go). You will be put in situations that ask you to act against your natural instincts. A lot of the social concepts you learned previously might seem irrelevant. The solution is not to abandon them all and adopt new ones. In fact, there is no right answer. It varies from one situation to another. But suffice to say it's not all rosy.

As long as you are aware of that, and are ready to face new challenges and opportunities, we are rooting for you. Take a page from the story of the old man Wilk Peters to appreciate the opportunities you have around you. It's a *wonderful* time to be alive. If you have a curious mind and discipline to support that, there's nothing stopping you from getting what you want!



## A LITTLE REFLECTION

Every chapter will have a few questions at the end for you to reflect upon. Don't skip over them.

- ▶ Why do you want to study abroad?
- ▶ What is lacking in your life right now that you believe higher education will have a solution to?
- ▶ What are you most grateful for in your life right now?



# Chapter 02

## CHOOSING THE MAJOR

Time to enter the basement  
of your mind



I will never forget how Richard Feynman described the instance he first encountered the cyclotron, a particle accelerator, at Princeton University.

“ MIT had built a new cyclotron while I was a student there, and it was just beautiful! The cyclotron itself was in one room, with the controls in another room. It was beautifully engineered. The wires ran from the control room to the cyclotron underneath in conduits, and there was a whole console of buttons and meters. It was what I would call a gold-plated cyclotron.

Now I had read a lot of papers on cyclotron experiments, and there weren't many from MIT. Maybe they were just starting. But there were lots of results from places like Cornell, and Berkeley, and above all, Princeton. Therefore what I really wanted to see, what I was looking forward to, was the PRINCETON CYCLOTRON. That must be something!

So first thing on Monday, I go into the physics building and ask, “Where is the cyclotron—which building?”

“It's downstairs, in the basement—at the end of the hall.”

In the basement? It was an old building. There was no room in the basement for a cyclotron. I walked down to the end of the hall, went through the door, and in ten seconds I learned why Princeton was right for me—the best place for me to go to school. In this room there were wires strung all over the place! Switches were hanging from the wires, cooling water was dripping from the valves, the room was full of stuff, all out in the open. Tables piled with tools were everywhere; it was the most god awful mess you ever saw. The whole

*cyclotron was there in one room, and it was complete,  
absolute chaos!*

*It reminded me of my lab at home. ”*

Like all good jokes, the punch line of that story is at the end, when Feynman compares the god-awful mess to the *laboratory* he set up at his home, at the age of seven, to tinker with and fix broken radios.



Surely you're joking!

Richard Feynman<sup>[1]</sup> can best be described as a physicist who broke all stereotypes of what it means to be one. He played the bongos, engaged in petty pranks, and came up with his own notations for *sine*, *cosine*, and *tangent*<sup>[2]</sup>. In 1999, he was regarded as one of the ten greatest physicists of all time by *Physics World*<sup>[3]</sup> and is still talked about with reverence and fondness in the scientific community. Not surprisingly, he won the Nobel Prize in 1965 jointly with Julian Schwinger and Shin'ichirō Tomonaga for their work in quantum electrodynamics.

He is remembered by many for his contributions to physics and quantum computing, but I like to remember him most for his childlike love for science. I read his semi-autobiographical book *Surely You're Joking, Mr. Feynman!* back in 2009 when my brother suggested I read it. I fell in love with the unadulterated vocabulary of the book that so glaringly conveyed the lifelong excitement he felt for physics, and more so, science.

## STUCK IN THE MIDDLE

If you're lucky, you might feel the same about your field. You might already have a strong opinion of what you want to study and research on. If you do, feel free to skip this chapter. A lot of students *do* end up pursuing their graduate school in the same domain they pursued their bachelor's in. From our personal experience though, we know that is not always the case.

I graduated with a master's in Management Science and Engineering, after completing my undergraduate in Chemical Engineering. Sai switched from Mechanical Engineering to Engineering Management. It's a good story to share with people and motivate them to trust their gut feeling, *now*. However, when we were actively undergoing that conundrum, it was far from easy.



I spent months wandering the basketball court and empty roads inside NIT Trichy wondering if I was making the right choice. My parents certainly didn't think so, but they supported me anyway, for which I'm eternally grateful.

I had spent two summers and a winter working inside laboratories at various universities (IIT-Madras, Indian Institute of Science, University of Wisconsin-Madison) on research related to renewable energy. I was also doing very well inside the class, securing the top rank consistently. This isn't to flaunt; rather to show you just how confused I felt when what seemed to be the *logical* next step didn't seem like the right one.

Back then, all I knew was that I wanted to move away from research and explore the world of business and management with no prior experience, except for serving as the founder and head of a social organization titled AIESEC in my university. Below is a passage from an essay I wrote in 2016:

“ *The decision of pursuing a degree in management has been the biggest change in my life so far. Until a few months ago, I thought I knew exactly what to do after graduation. I had a strong background to apply for one of the top schools for a PhD. But what after that? Would I feel satisfied at the end of each day while I return back to my apartment? Would I be able to lie to myself for 5 years? These were questions that haunted me, every day.* ”

It's excruciating when what you *want* to do derails from what you *should* do. I began questioning if the past three years of my life were wasted chasing after the wrong dream. I'm positive my friends and peers thought I was committing a grave mistake. Some of them were even vocal about it. In hindsight, however, I could not have been more right. I have the utmost respect for doctoral candidates, but I know I would have made a very average and unhappy researcher if I was confined to a lab for five years. I'm still learning what it takes to build products and relationships with people, but I already know this is where I can eventually be extraordinary.

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You need to find the area where you can be *extraordinary*.  
Don't settle for being average.

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Let's be clear about one thing: *it will neither be easy nor pleasant to make this transition*. However, in the long run, you will be incredibly thankful to yourself. We still wanted to make this process slightly easier for you by introducing a renowned concept that can come in handy in these situations.

## FINDING YOUR *IKIGAI*

Dan Buettner<sup>[4]</sup>, a three-time Guinness record holder and best-selling author, conducted a long experiment to find out how people who live to be more than

a 100 years old, called centenarians, manage to do it. His team spoke to the centenarians from four *Blue Zones* where they found the most number of people who lived the longest<sup>[5]</sup>. One of the zones included the northern part of Okinawa, a prefecture in Japan made up of 161 islands. Aside from a plant-based diet and a tight-knit community, he found out that what set them apart was their practice of *ikigai*<sup>[6]</sup>.

*Ikigai*<sup>[7]</sup> (pronounced ee-key-guy) is a Japanese word that loosely means *the reason you get up in the morning*. It encompasses the idea that happiness is more than money and titles. According to a book written on this concept by Hector Garcia and Albert Liebermann<sup>[8]</sup>, “*The origin of the word ikigai goes back to the Heian period (794 to 1185). Clinical psychologist and avid expert of the ikigai evolution, Akihiro Hasegawa released a research paper in 2001 where he wrote that the word “gai” comes from the word “kai” which translates to “shell” in Japanese. During the Heian period, shells were extremely valuable, so the association of value is still inherently seen in this word.*”

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This intangible ideology is what gives you the sense of purpose and meaning that most people search for their entire life.

It makes your life worthwhile, happy, and satisfactory.

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But, how do you find it?



The most actionable way to understand this idea is through a Venn diagram that comprises four categories as shown above: what you are good at, what the world needs, what you can be paid for, and what you love. At their intersection, you supposedly find your *ikigai*.

Let's look at each in some detail.

### WHAT YOU ARE GOOD AT

This quadrant is about trying to bring out both your natural and hard-earned talents.



What part of your current job can you do effortlessly, without even thinking about it?

When was the last time someone gave you a compliment? What was it about?

With some more education and experience, could you be among the best at what you do? Are you already the best at something in your community (class/office)?

More often than not, we have blind spots when it comes to our strengths and weaknesses. Melody Wilding, an executive coach and author who found her purpose by practicing *ikigai*<sup>[9]</sup>, writes, “Ironically, qualities about myself that I took for granted were precisely what others saw as unique and valuable. Instead of downplaying my knack for empathy, their comments nudged me to look deeper at how I could leverage my sensitivity as a strength and pivot my career to focus on coaching, teaching, and writing.”

So, as you are filling this quadrant, ask some of your closest friends and those who work with you about your strengths. Their answer might just surprise you.

## WHAT THE WORLD NEEDS

This quadrant is about trying to unearth what you care about and what you can contribute to the world, society, and your family.



What was the last social cause you cared about deeply?

What would you contribute to immediately in your society if you had more time?

What do you think we can do now as a community to make 2030 better than 2020?

Whenever I think about this quadrant, I get reminded of something that Tim Cook, the CEO of Apple, said in an interview with Marc Benioff<sup>[10]</sup>. Below is a paraphrased version of his talk.

“ It became clear to me in my upper 30s that we are searching for a lifetime for our purpose. Early in life, you think your purpose is deciding your major in school. You choose your major and you graduate. But guess what? You still don’t know what your purpose is. So you keep looking and you think maybe it’s about getting a job. But, no, it wasn’t that. And then maybe it becomes a promotion, maybe it becomes a marriage, maybe it becomes a child. And at some point you recognize that the reason we are all here is to help somebody else.

That is the sole reason we are here. ”



## WHAT YOU CAN BE PAID FOR

Whether you like it or not, you need to do something that brings the bread home. This quadrant is about trying to figure out what that something is.



What exactly are you being paid for today?

If you're not paid for something you do today, are other people being paid for the same activity?

Can you eventually be paid for it?

We live in an age where jobs that never existed a decade ago are heavily sought after today. Being a YouTuber went from a side-hobby to a serious job for many millennials<sup>[11]</sup>. Being an influencer on TikTok can earn you more than an entry level Software Engineer role at Google<sup>[12]</sup>. Ten years from now, don't be alarmed when you see jobs with titles like *Drone Traffic Controller* and *AR Journey Builder*.

---

The world is moving fast.

So think outside the box when you answer this question.

---

## WHAT YOU LOVE

Ah, we come to the most important quadrant of all. This quadrant is helping you figure out what makes it all worth it.



If money didn't matter, what would you spend your time doing?

When was the last time you were in a state of *flow*? (remember *The Flow* from Chapter 1?)

What can you not shut up about?

Your passion may not always be the *cause* of things. I did not grow up dreaming to be an author one day. I grew up wanting to be a surgeon. I became an author after spending years learning to write and *actually* writing. The thousands of hours spent made me feel passionate about this craft, and now I cannot imagine *not* being an author. So don't just look at things you feel passionate about without actually having spent time dipping your toes in them.

## THE YEARNING OCTOPUS

Have you ever realized how our incredibly complex brain makes it hard to follow a singular line of thought? We *Homo sapiens* underwent a mutation in the wiring of our brain about 70,000 years ago that gave us the ability to *think*. We didn't just care about hunting for the next meal anymore. We didn't restrict ourselves to the land we occupied. Nor did we stick to primitive tools to hunt down animals. Below is a passage taken from the best-seller *Sapiens* by Yuval Noah Harari<sup>[13]</sup>.

“ Beginning about 70,000 years ago, *Homo sapiens* began doing very special things. They drove the Neanderthals and all other human species not only from the Middle East, but from the face of the earth. Within a remarkably short period, *Sapiens* reached Europe and East Asia. About 45,000 years ago, they somehow crossed the open sea and landed in Australia—a continent hitherto untouched by humans. The period from about 70,000 years ago to about 30,000 years ago witnessed the invention of boats, oil lamps, and bows and arrows and needles. The first objects that can reliably be called art date from this era, as does the first clear evidence for religion, commerce and social

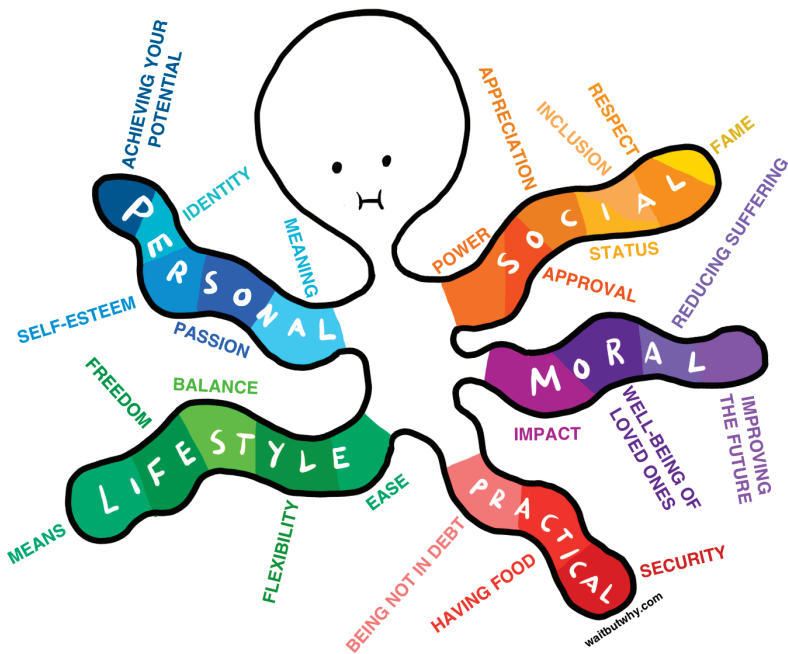
*stratification. This constitutes the Cognitive Revolution.*

*What caused it?*

*We're not sure. ”*

We have many theories, but no conclusive proof yet. The point, however, is that we slowly developed the neocortex in our brain which gave us the ability to reason, make complex decisions, develop language, believe in fiction, and sacrifice short-term gratification for long-term gains<sup>[14]</sup>. It also gave us the ability to hold competing thoughts in our head and make hundreds of decisions every single day. This is why finding your ikigai is not a simple exercise.

Tim Urban, a famous long-form blogger<sup>[15]</sup>, captures this chaos well with what he calls **The Yearning Octopus** (which is really a pentapus, but we're not complaining)<sup>[16]</sup>.



Tim posits that at any point in time, you have five micro-humans in your mind who each have their own agenda and demand your attention and cognitive resources.

While the Personal tentacle probes you to follow your passion and find meaning in what you do, the Social tentacle wants you to follow the path that will earn your parents' respect. Your Moral tentacle is deeply concerned about the well-being of the thousands of Syrian kids who are enslaved, but your Lifestyle tentacle thinks you should just relax and enjoy your own life sitting by the beach. All the while your Practical tentacle is in panic mode because you don't have enough money to pay the rent on Tuesday.

---

Everyone has a Yearning Octopus inside of them.

Mine would look different from yours.

And yours would look different from anyone else's.

---

You will tend to rank the five tentacles based on *your* life experiences and beliefs such that one of them always takes the upper hand. Your job is to identify how they are ranked inside your head *and* understand the motivation behind each of them. Maybe it is your mom masquerading as the Social tentacle and urging you to follow a career path that she never got a chance to. Maybe the Practical tentacle trumps all others because the 10-year-old you never forgot what it meant to live in poverty. It is crucial that you figure out which motivations are authentic and which are simply imposters. Tim urges you to ask yourself<sup>[16]</sup>:

“ *Do you treat the words of your external influences as information, held and considered by an authentic inner you, that you've carefully decided to embrace? Or are your influences themselves actually in your brain, masquerading*

*as inner you?*

*Do you want the same thing someone else you know wants because you heard them talk about it, you thought about it alongside your own life experience, and you eventually decided that, for now, you agree? Or because you heard someone talk about what they want or fear, and you thought, “I don’t know shit and that person does, so if they say X is true, I’m sure they’re right”—and then you etched those ideas into your mind, never again feeling the need to question them? ”*

Unearthing the answers to these questions and finding your ikigai requires doing something that no one really likes to do: **introspection**.

In its most basic sense, introspection is akin to visiting the dark and scary basement in your mind by asking yourself tough questions and observing your thoughts, with no judgement. Just observe what surfaces and take note of it, and repeat the experiment all over again. You can gain inspiration to do this by reading articles, such as the one written by Tim, and others found online<sup>[17]</sup>. There is no dearth of information in this age of information.

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Know that however you do it, you can’t escape the dreaded activity of being alone with your thoughts.

---

## TYING IT ALL TOGETHER

Coming back to our Venn diagram, begin filling in the quadrants. Take your time. It doesn’t have to be completed in an hour. Have a first stab at it, and come back again tomorrow. And the next day. And the next. Until you feel you

have a stable, final version of it.

You will begin to see correlations and new possibilities between the various quadrants. Like me, you might have thought you were supposed to become a researcher but all your thoughts on paper say otherwise. Whatever you come up with, find out the closest major that will get you there eventually. Your ikigai should be thought of as a north star. You might never reach there, but as long as you are tending towards it, all is well.

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You aren't right or wrong in picking  
one major over the other.

---

Even if you don't end up picking the most optimal one (assuming it is possible to quantify this process), you know you picked one after careful thought. That already puts you in a better position than most people who live their life on autopilot.



## CONCLUSION

We all know someone who derives pure joy from what they do. One of my best friends works 12 hours a day, including the weekends, at a healthtech startup in New York. Yet he enjoys his work deeply. If you're lucky, you might feel this way about the domain that you're in already. However, from personal experience, we know that's not always the case. Sometimes we find ourselves following a path because we were good at it or because someone else thought it was the right path for us. You need to shrug off all those preconceptions and start from scratch.

Enter ikigai. An ideology that originated in Japan and percolated the rest of the world over the past two decades. Ikigai is the sweet spot that resides at the intersection of what you are good at, what the world needs, what you can be paid for, and what you love. We posed a few questions for each of the

quadrants that will help you figure out the answers to these. You don't need to write down the answers right away. Take your time. This is not a simple problem.

At its core, *ikigai* requires you to introspect. That is not something we all enjoy because when we begin to introspect, we begin to find a lot of imposters in the basement of our mind. Even though we are in a constant five-way tug-of-war between the various *tentacles* of the Yearning Octopus, one always takes the upper hand. To find out the motivation behind these creatures, you need to be alone with your thoughts.

There really is no *optimal* choice of major here. However, if you did all the above, you're in a better position than most others who never cared to scratch the surface.

## A LITTLE REFLECTION

- ▶ What were you reminded of, if anything, about yourself, when you read the story of Richard Feynman?
- ▶ Did you identify any blind spots after you asked your close friends about your strengths?
- ▶ When were you last in a state of *flow*?
- ▶ Did you find any imposters in the basement during your introspection?





# Chapter 03

## CHOOSING THE UNIVERSITIES

Time to become a satisficer and  
shortlist universities

*25 more universities  
waiting to be seen...*



### California Institute of Technology

📍 Pasadena, California

Min. 105 in TOEFL | \$50,000 tuition |  
95% placement rate | The Big Bang  
Theory's home base



We're back to decisions again. Think back to the most recent decision you made in your life. It doesn't have to be a significant one. It can even be a trivial decision of purchasing a Classmate Octane Premium gel pen over a Pilot Retractable Premium gel pen. How much thought did you put into making this decision? Did you consider all possible factors: the tip type, material, color, grip type, weight, price, popularity? Did you assign weights to each factor and pick the pen that was mathematically the more optimal one? Unless you were conducting extensive research on developing a new pen for your company or writing a thesis on the effects of one over the other, chances are you calculated a few pros and cons in your mind, such as cost and comfort, and picked the one that *satisficed* you.

That word is not a typo.

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Not only is that word not a typo, it will be the guiding principle as you go through the ordeal of choosing universities.

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## SATISFICER, SIMON & SELECTING UNIVERSITIES



The term **satisfice**<sup>[1]</sup>, a linguistic blend of **satisfy** and **suffice**, was coined by Herbert Simon<sup>[2]</sup> in 1956. Simon coined the term to strike a distinction between classical and behavioral economics.

Classical economics posits that we are all *maximizers* who strive to get the very best out of every decision we make. However, this assumes that we are rational and armed with the information needed to make that *optimal* choice. Simon proposed that this is rarely, if ever, the case, due to the limits of human cognition<sup>[3]</sup>.

Rather, he suggests an alternative route wherein the “*decision makers can satisfice either by finding optimum solutions for a simplified world, or by finding satisfactory solutions for a more realistic world.*” In both cases, the satisficer is happy to walk away with a *good enough* solution that meets a certain threshold set by them as opposed to the best possible one. And research<sup>[4]</sup> has shown that the satisficer is also *happier* on average than the maximizer, especially in situations where the available options are abundant and personal freedom is championed.

Why is this important?

Once you begin entering the rabbit hole of comparing universities, you will soon find the need to draw a boundary between being a satisficer and a maximizer. You will also tend to associate great importance to this decision and increase your stress levels by going over too many factors, always fearing that you haven’t done a thorough enough job. Using the time and energy in your hand as a constraint, we will help you pick the factors that we believe are important to consider while choosing your top universities, but ultimately, the decision is in your hands.

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So at this stage when you’re beginning to narrow down  
universities to apply to, we want you to be a satisficer.

Not a maximizer.

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However, once you begin receiving admits from the places you apply to, you can turn to be a maximizer. But more on that in Chapter 13. For now, keep telling yourself to be a satisficer.



OKAY, I'LL BE A SATISFICER.  
HOW DO I BEGIN **CREATING** THE LIST  
OF UNIVERSITIES?

Well, the first thing to keep in mind about first instincts is that they are almost always wrong.



Your first instinct in choosing universities might be to skim through a ranking website, note down the universities listed at the top, and begin applying. But before you fall into that trap, let's take a step back to **understand the mechanism** behind these ranking sites.

Based on a preliminary google search, you will notice that there are three ranking sites that grab the top spots: QS World University Rankings<sup>[5]</sup>, Times Higher Education World University Rankings<sup>[6]</sup>, and Academic Rankings of World Universities<sup>[7]</sup>. Taking National University of Singapore as an example, based on the most recent data, it ranks 11th according to QS, 23rd according to THE, and 85th according to ARWU. Why? Because the methodology used and data input for the ranking sites are significantly different. There is a weighted bias towards specific factors when the overall scores are measured.

## METHOD TO THE MADNESS

Let's peek behind the curtains of each rankings site.

### QUACQUARELLI SYMONDS (QS) WORLD UNIVERSITY RANKINGS

This is an annual publication by Quacquarelli Symonds, a British publication. According to Alexa Internet, an American web traffic tracking company, it is

the most widely viewed university ranking worldwide<sup>[8]</sup>. QS partners with Elsevier to provide the rankings across 48 subjects and also across regional areas such as Asia, Latin America, Europe, and more.



**QS collects feedback from over 100,000 academicians**, who are all asked to nominate the top 30 universities (and cannot vote for their own)<sup>[9]</sup>. This subjective feedback is given a weightage of 40%. The other performance indicators include the faculty-student ratio, citations per faculty, employer review, international student ratio, and international staff ratio.

#### **TIMES HIGHER EDUCATION (THE) WORLD UNIVERSITY RANKINGS**

This is an annual publication by the Times Higher Education magazine. Interestingly, until 2009, THE collaborated with QS to jointly publish the annual rankings. However, they turned to Thomson Reuters for a new ranking system in 2010 and later signed another deal with Elsevier in 2014<sup>[10]</sup>. Their rankings are also independently audited by the professional services firm PricewaterhouseCoopers (PwC).



**THE collects feedback on 1,400 universities** worldwide across 13 performance indicators that are grouped into five categories: teaching, research, citations, international outlook, and industry income<sup>[11]</sup>. Teaching, research, and citations each get a weightage of 30%. Their most recent academic reputation survey garnered over 21,000 responses and Elsevier examined over 77 million citations to arrive at the research influence.

ACADEMIC RANKING OF WORLD UNIVERSITIES (ARWU)

Also known as Shanghai Ranking, this is published by the Shanghai Ranking Consultancy, an independent organization focusing on higher education<sup>[12]</sup>. ARWU is regarded as one of the three most influential lists of university rankings, alongside QS and THE.



**ARWU ranks over 1,800 universities** out of which the top 1000 are published. ARWU seems to take a different approach<sup>[13]</sup>. They give 20% weight each to the following four indicators: staff winning Nobel Prizes or Fields Medals, highly cited researchers, papers published in *Nature* and *Science* journals, and papers indexed in Science Citation Index-Expanded and Social Science Citation Index. The rest is spread across alumni reputation and per capita performance.

Below is a table that puts this all together to give you a big picture view.

| Category                       | Performance Indicators                   | QS  | THE  | ARWU |
|--------------------------------|------------------------------------------|-----|------|------|
| Academic & Research Reputation | Survey of academicians                   | 40% | 33%  | -    |
| Research Influence             | Citations received globally              | 20% | 30%  | 40%  |
| Staff & Student Ratios         | Various ratios across staff and students | 20% | 15%  | 10%  |
| Staff & Alumni Reputation      | Nobel Prizes and Fields Medals won       | -   | -    | 30%  |
| Research Productivity          | Papers published in top journals         | -   | 6%   | 20%  |
| Employer Reputation            | Survey of employers                      | 10% | -    | -    |
| International Outlook          | International students and staff         | 10% | 7.5% | -    |
| Income Received                | Externally received income for research  | -   | 8.5% | -    |



Do note that since we combined all the ranking methodologies into a single table, **a lot of the nuance is lost**. For example, although both THE and ARWU have weightage for research productivity, it means different things. THE calculates it based on papers published across all journals indexed by Elsevier's Scopus. On the other hand, ARWU *only* looks at papers published in *Nature* and *Science*. Hence, **we highly recommend looking at each of their methodologies** to get a better understanding.

All that data and information is to highlight a few points.

- ▶ First, when you're looking at these ranking sites, understand that the rankings mentioned are for the *entire* university and are not degree specific, meaning your program's ranking might be significantly different from the university's ranking. Take the case of Dartmouth College. It currently ranks 207<sup>th</sup> in the world according to the QS, but is an Ivy League with one of the top Engineering Management programs<sup>[14]</sup>. Even for the university level, both QS and THE rely on *subjective* data to compute it, which has its own biases.
- ▶ Second, all three ranking sites look at the citations received by a university on a global level. While this might be a good indicator for domains like biomedical sciences that have a *publish or perish* culture<sup>[15]</sup>, it isn't a good representation of non-science majors that publish less by trade. Adding on to that, the ranking sites also don't take into account the non-English institutions.
- ▶ Finally, even if you choose to follow one of these sites, they still don't take all *your* factors into consideration. Ironically, these are the factors that have a direct impact on your day-to-day

experience, such as resources provided for networking, classroom amenities, quality of courses, quality of food and housing, to name a few<sup>[16]</sup>.

You don't choose whether to buy a mac or windows laptop just by looking at the share prices of Apple and Microsoft, do you<sup>[17]</sup>? Sure, it's helpful to know they're doing well and still at the top of their game, but your need requires a lot more granular information.

DOES THAT MEAN I SHOULD NOT USE  
THESE WEBSITES TO CREATE **A LIST?**



No, we are not discrediting these ranking websites completely. You would still need them to pick universities since there is too much noise out there. Use these, but *only* as a starting point. Beyond that, we need to go deeper into the factors that will truly define your experience.

## THE QUADRANT FRAMEWORK

When you're purchasing a new house, you don't just look at the price of the house. You also look at the location, mortgage, down payment, number of bedrooms, quality of furniture, and more. All of these factors will affect your experience after you move into the house. Your graduate school follows the same analogy.

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Although it is easier to choose a university solely based on its rank, that is not an indicator of your experience, good or bad, once you join.

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Below is a table with all the factors that we thought you should be looking at while evaluating the universities to apply to.

| Requirements                                                           | Academia                                        |
|------------------------------------------------------------------------|-------------------------------------------------|
| CGPA<br>GRE<br>TOEFL<br>IELTS<br>Tuition                               | Courses<br>Research areas<br>STEM Certification |
| Career                                                                 | Miscellaneous                                   |
| Top Career Paths<br>Average salary<br>Internship & Placement Statistic | Ranking<br>Location<br>Personal Dealbreakers    |

- **Requirements:** Most universities try to reduce the applicant pool size by specifying the minimum *scores* that you must have to even apply in the first place. These scores allude to your CGPA, GRE, TOEFL, and IELTS exams. Apart from the scores, we placed the tuition fee in this section since that should be considered a limiting factor to apply as well, since it could range from \$20,000 for a university like Texas A&M all way to \$80,000 for a university like Columbia (not counting for scholarships or assistantships).
- **Academia:** Once you validate that you satisfy the requirements, this should be the second most important quadrant to look at. On average, you will spend about 25% of your waking hours in classes, 50% on assignments and research, and the rest on job search and leisure activities. So the courses you take and research you conduct will define the largest chunk of your graduate school experience.
- **Career:** Most of you want to not just study abroad, but also work abroad. We know from experience, as explained in Chapter 1, that getting an internship or a job is not the easiest feat to achieve. It would be wise to choose a university that helps you in this process in addition to teaching you the concepts and skills required for the job.

- **Miscellaneous:** This contains factors such as ranking and location that we couldn't place neatly under the other quadrants. Apart from the ones we've listed above for all quadrants, feel free to add more that are personal dealbreakers specific to your background.



Good question! Funnily enough, the problem isn't that there is *too little* information. Rather, there is *too much* of it.



This phenomenon even has a term: **information overload**. It was coined back in 1964<sup>[18]</sup> by Bertram Gross in his book *The Managing of Organizations*. As the decades rolled on, the overload only got more and more dire with the advent of the **internet, email, and now social media**.

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Now, your task is to find useful information amidst all this noise, rather than just find the information.

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Let's find out how we can do it for the various quadrants below.

## ✓ REQUIREMENTS

The information on scores and tuition will be present in the department's website, although in different formats. Consider the following example: the Computer Science department at Purdue University clearly states that the

past admits all had a “GPA of at least 3.5/4 or 85/100 or 8.5/10, and total TOEFL scores of at least 100 and subsection scores of at least 22, or IELTS scores of at least 7.5”<sup>[19]</sup>. On the other hand, the Computer Science department at Stanford University states that they expect the “applicants to have “good” English skills” without specifying the minimum required scores<sup>[20]</sup>.

For situations like this, we have another solution for you: **admits.fyi**.

| University                        | Status | Target Major                      | Term        | GRE |     |     |       | TOEFL |
|-----------------------------------|--------|-----------------------------------|-------------|-----|-----|-----|-------|-------|
|                                   |        |                                   |             | Q   | V   | AWA | Total |       |
| University of Michigan, Ann Arbor | Reject | Computer Science                  | Fall 2019   | 163 | 163 | N/A | 326   | 110   |
| Stanford University               | Admit  | Computer Science                  | Fall 2019   | 170 | 159 | N/A | 329   | 111   |
| Arizona State University          | Admit  | Computer Science                  | Fall 2018   | 169 | 150 | N/A | 319   | 98    |
| Syracuse University               | Admit  | Computer Engineering              | Spring 2018 | 158 | 146 | N/A | 304   | N/A   |
| Georgia Institute of Technology   | Reject | Electrical & Computer Engineering | Fall 2016   | 161 | 150 | N/A | 311   | 100   |

Two 2015 graduates from BITS Pilani, Pranav<sup>[21]</sup> and Abdul<sup>[22]</sup>, used their coding expertise and curious minds to build *admits.fyi* with more than 350,000 data points from past admits and rejects. They spent weeks gathering this data from various sources, cleaning it, and building an intuitive user interface for everyone to consume<sup>[23]</sup>. Every admit and reject has details on undergraduate school, graduate school, CGPA, GRE score, TOEFL score, major, and more. In the absence of a baseline on the department’s website, use this as a sanity check *if* there are enough data points (>50). However, know that outliers are always possible.

## ACADEMIA

Under Academia, we have courses, research, and STEM certification.

### COURSES

Fortunately, every department has a course catalog which lists all the courses you can potentially take during your graduate school. Apart from providing

the course titles, most universities will supplement that with one-paragraph descriptions, instructor names, duration, offered semester, and number of credits. Similar to *Requirements*, this too changes based on the university. For example, Texas A&M lists all its mechanical engineering graduate courses with just a one-paragraph description on its site<sup>[24]</sup>. University of Washington goes further to create a separate page for each course—detailing your takeaways, syllabus, homework deadlines and more—from its list of courses<sup>[25]</sup>. Columbia University on the other hand provides you a flowchart of the courses you can take based on the specialization you are interested in<sup>[26]</sup>. Bottom line?

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Course information *will* be on the department website.  
If it isn't, you should think twice about applying to that university.

---

Universities in the U.S. also go a step further to include course evaluations collected from past students. However, these are generally hidden behind an authentication portal, and not accessible to the public. It's worth checking once though.

## RESEARCH

Here's some good news for all the computer science graduates out there: a huge chunk of your work in collecting information on research conducted at U.S. universities has already been completed by the creators of **CSRankings**<sup>[27]</sup>. Below is a good introduction to the website, taken from its FAQ page:

“*Rankings are intensely popular and influential. While we might wish for a world without rankings, wishing will not make rankings go away. Given this state of affairs, it makes*

*sense to aim for a ranking system that is meaningful and transparent. Unfortunately, the most influential rankings right now are those from US News and World Report, which is entirely reputation-based and relies on surveys sent to department heads and directors of graduate studies.*

*By contrast, CSRankings is entirely metrics-based: it weighs departments by their presence at the most prestigious publication venues. This approach is intended to be both incentive-aligned (faculty already aim to publish at top venues) and difficult to game, since publishing in such conferences is difficult. It is admittedly bean-counting, but its intent is to "count the right beans". ”*

---

CSRankings ranks universities based solely on the number of papers published and the venue of those publications.

---

Since a paper published in a tier one journal is not the same as a paper published in a tier three journal, the code takes this into account by only considering the conferences which are among the top in the respective domains. For example, only papers published in CVPR<sup>[28]</sup>, ECCV<sup>[29]</sup>, and ICCV<sup>[30]</sup> conferences are considered in the Computer Vision domain. It also uses an *adjusted count* when there is more than one contributing author so that the credit is divided equally among everyone (ergo more authors does not equal more value). The creator, Emery Berger<sup>[31]</sup>, who is a Professor of Computer Science at the University of Massachusetts Amherst, used data from Google Scholar<sup>[32]</sup> and DBLP<sup>[33]</sup> to create this system.

When you navigate to the website, we recommend reading the FAQ and the advice<sup>[34]</sup> they have for aspiring graduates before looking at the rankings.

Even then, understand that the default rankings are based on *all* domains under computer science. You should deselect them all to then choose the domain of your interest on the left pane and see the results.

## CSRankings: Computer Science Rankings

|                                   |                                     |  |  |
|-----------------------------------|-------------------------------------|--|--|
| <b>All Areas</b> [off   on]       |                                     |  |  |
| <b>AI</b> [off   on]              |                                     |  |  |
| ▶ Artificial intelligence         | <input checked="" type="checkbox"/> |  |  |
| ▶ Computer vision                 | <input type="checkbox"/>            |  |  |
| ▶ Machine learning & data mining  | <input type="checkbox"/>            |  |  |
| ▶ Natural language processing     | <input type="checkbox"/>            |  |  |
| ▶ The Web & information retrieval | <input type="checkbox"/>            |  |  |
| <b>Systems</b> [off   on]         |                                     |  |  |
| ▶ Computer architecture           | <input type="checkbox"/>            |  |  |
| ▶ Computer networks               | <input type="checkbox"/>            |  |  |
| ▶ Computer security               | <input type="checkbox"/>            |  |  |

| # | Institution                              | Count | Faculty |
|---|------------------------------------------|-------|---------|
| 1 | ▶ Carnegie Mellon University             | 51.3  | 41      |
| 2 | ▶ Harvard University                     | 43.8  | 10      |
| 3 | ▶ University of California - Los Angeles | 40.7  | 14      |
| 4 | ▶ University of Pittsburgh               | 30.6  | 10      |
| 5 | ▶ Washington University in St. Louis     | 28.0  | 8       |
| 6 | ▶ University of Massachusetts Amherst    | 27.3  | 13      |
| 7 | ▶ University of Texas at Austin          | 26.6  | 14      |
| 8 | ▶ Duke University                        | 25.9  | 9       |
| 9 | ▶ University of Michigan                 | 24.7  | 15      |

Look at the faculty under each university and navigate to their home pages to see the research being conducted.

CSRankings is a great tool; but not a flawless one.

As you use it to narrow down your universities, understand that it was still created by people who have biases.

### TIME TO DIY

We know this still doesn’t answer the question for all of you non-computer science graduates out there. Fret not. There are always different layers of solving an issue.

You might be using novel digital tools today to perform calculations. But have you ever wondered what people used to use before Google Sheets came into the picture? Or Microsoft Office? Or VisiCalc?

Just paper<sup>[35]</sup>.

| 38 FEB. 1862 |             | W. H. WATSON |         | J. H. WATSON |         | BALANCE  |         |
|--------------|-------------|--------------|---------|--------------|---------|----------|---------|
| DATE         | DESCRIPTION | RECEIPTS     | PAID    | RECEIPTS     | PAID    | RECEIPTS | PAID    |
| FEB. 1       | CASH        | 100.00       |         | 100.00       |         | 100.00   |         |
| FEB. 2       | BANK        | 50.00        |         | 50.00        |         | 50.00    |         |
| FEB. 3       | DEBTS       |              | 20.00   |              | 20.00   |          | 20.00   |
| FEB. 4       | CASH        | 75.00        |         | 75.00        |         | 75.00    |         |
| FEB. 5       | BANK        | 25.00        |         | 25.00        |         | 25.00    |         |
| FEB. 6       | DEBTS       |              | 10.00   |              | 10.00   |          | 10.00   |
| FEB. 7       | CASH        | 150.00       |         | 150.00       |         | 150.00   |         |
| FEB. 8       | BANK        | 100.00       |         | 100.00       |         | 100.00   |         |
| FEB. 9       | DEBTS       |              | 50.00   |              | 50.00   |          | 50.00   |
| FEB. 10      | CASH        | 200.00       |         | 200.00       |         | 200.00   |         |
| FEB. 11      | BANK        | 150.00       |         | 150.00       |         | 150.00   |         |
| FEB. 12      | DEBTS       |              | 75.00   |              | 75.00   |          | 75.00   |
| FEB. 13      | CASH        | 300.00       |         | 300.00       |         | 300.00   |         |
| FEB. 14      | BANK        | 250.00       |         | 250.00       |         | 250.00   |         |
| FEB. 15      | DEBTS       |              | 125.00  |              | 125.00  |          | 125.00  |
| FEB. 16      | CASH        | 400.00       |         | 400.00       |         | 400.00   |         |
| FEB. 17      | BANK        | 350.00       |         | 350.00       |         | 350.00   |         |
| FEB. 18      | DEBTS       |              | 175.00  |              | 175.00  |          | 175.00  |
| FEB. 19      | CASH        | 500.00       |         | 500.00       |         | 500.00   |         |
| FEB. 20      | BANK        | 450.00       |         | 450.00       |         | 450.00   |         |
| FEB. 21      | DEBTS       |              | 225.00  |              | 225.00  |          | 225.00  |
| FEB. 22      | CASH        | 600.00       |         | 600.00       |         | 600.00   |         |
| FEB. 23      | BANK        | 550.00       |         | 550.00       |         | 550.00   |         |
| FEB. 24      | DEBTS       |              | 275.00  |              | 275.00  |          | 275.00  |
| FEB. 25      | CASH        | 700.00       |         | 700.00       |         | 700.00   |         |
| FEB. 26      | BANK        | 650.00       |         | 650.00       |         | 650.00   |         |
| FEB. 27      | DEBTS       |              | 325.00  |              | 325.00  |          | 325.00  |
| FEB. 28      | CASH        | 800.00       |         | 800.00       |         | 800.00   |         |
| FEB. 29      | BANK        | 750.00       |         | 750.00       |         | 750.00   |         |
| FEB. 30      | DEBTS       |              | 375.00  |              | 375.00  |          | 375.00  |
| FEB. 31      | CASH        | 900.00       |         | 900.00       |         | 900.00   |         |
| FEB. 32      | BANK        | 850.00       |         | 850.00       |         | 850.00   |         |
| FEB. 33      | DEBTS       |              | 425.00  |              | 425.00  |          | 425.00  |
| FEB. 34      | CASH        | 1000.00      |         | 1000.00      |         | 1000.00  |         |
| FEB. 35      | BANK        | 950.00       |         | 950.00       |         | 950.00   |         |
| FEB. 36      | DEBTS       |              | 475.00  |              | 475.00  |          | 475.00  |
| FEB. 37      | CASH        | 1100.00      |         | 1100.00      |         | 1100.00  |         |
| FEB. 38      | BANK        | 1050.00      |         | 1050.00      |         | 1050.00  |         |
| FEB. 39      | DEBTS       |              | 525.00  |              | 525.00  |          | 525.00  |
| FEB. 40      | CASH        | 1200.00      |         | 1200.00      |         | 1200.00  |         |
| FEB. 41      | BANK        | 1150.00      |         | 1150.00      |         | 1150.00  |         |
| FEB. 42      | DEBTS       |              | 575.00  |              | 575.00  |          | 575.00  |
| FEB. 43      | CASH        | 1300.00      |         | 1300.00      |         | 1300.00  |         |
| FEB. 44      | BANK        | 1250.00      |         | 1250.00      |         | 1250.00  |         |
| FEB. 45      | DEBTS       |              | 625.00  |              | 625.00  |          | 625.00  |
| FEB. 46      | CASH        | 1400.00      |         | 1400.00      |         | 1400.00  |         |
| FEB. 47      | BANK        | 1350.00      |         | 1350.00      |         | 1350.00  |         |
| FEB. 48      | DEBTS       |              | 675.00  |              | 675.00  |          | 675.00  |
| FEB. 49      | CASH        | 1500.00      |         | 1500.00      |         | 1500.00  |         |
| FEB. 50      | BANK        | 1450.00      |         | 1450.00      |         | 1450.00  |         |
| FEB. 51      | DEBTS       |              | 725.00  |              | 725.00  |          | 725.00  |
| FEB. 52      | CASH        | 1600.00      |         | 1600.00      |         | 1600.00  |         |
| FEB. 53      | BANK        | 1550.00      |         | 1550.00      |         | 1550.00  |         |
| FEB. 54      | DEBTS       |              | 775.00  |              | 775.00  |          | 775.00  |
| FEB. 55      | CASH        | 1700.00      |         | 1700.00      |         | 1700.00  |         |
| FEB. 56      | BANK        | 1650.00      |         | 1650.00      |         | 1650.00  |         |
| FEB. 57      | DEBTS       |              | 825.00  |              | 825.00  |          | 825.00  |
| FEB. 58      | CASH        | 1800.00      |         | 1800.00      |         | 1800.00  |         |
| FEB. 59      | BANK        | 1750.00      |         | 1750.00      |         | 1750.00  |         |
| FEB. 60      | DEBTS       |              | 875.00  |              | 875.00  |          | 875.00  |
| FEB. 61      | CASH        | 1900.00      |         | 1900.00      |         | 1900.00  |         |
| FEB. 62      | BANK        | 1850.00      |         | 1850.00      |         | 1850.00  |         |
| FEB. 63      | DEBTS       |              | 925.00  |              | 925.00  |          | 925.00  |
| FEB. 64      | CASH        | 2000.00      |         | 2000.00      |         | 2000.00  |         |
| FEB. 65      | BANK        | 1950.00      |         | 1950.00      |         | 1950.00  |         |
| FEB. 66      | DEBTS       |              | 975.00  |              | 975.00  |          | 975.00  |
| FEB. 67      | CASH        | 2100.00      |         | 2100.00      |         | 2100.00  |         |
| FEB. 68      | BANK        | 2050.00      |         | 2050.00      |         | 2050.00  |         |
| FEB. 69      | DEBTS       |              | 1025.00 |              | 1025.00 |          | 1025.00 |
| FEB. 70      | CASH        | 2200.00      |         | 2200.00      |         | 2200.00  |         |
| FEB. 71      | BANK        | 2150.00      |         | 2150.00      |         | 2150.00  |         |
| FEB. 72      | DEBTS       |              | 1075.00 |              | 1075.00 |          | 1075.00 |
| FEB. 73      | CASH        | 2300.00      |         | 2300.00      |         | 2300.00  |         |
| FEB. 74      | BANK        | 2250.00      |         | 2250.00      |         | 2250.00  |         |
| FEB. 75      | DEBTS       |              | 1125.00 |              | 1125.00 |          | 1125.00 |
| FEB. 76      | CASH        | 2400.00      |         | 2400.00      |         | 2400.00  |         |
| FEB. 77      | BANK        | 2350.00      |         | 2350.00      |         | 2350.00  |         |
| FEB. 78      | DEBTS       |              | 1175.00 |              | 1175.00 |          | 1175.00 |
| FEB. 79      | CASH        | 2500.00      |         | 2500.00      |         | 2500.00  |         |
| FEB. 80      | BANK        | 2450.00      |         | 2450.00      |         | 2450.00  |         |
| FEB. 81      | DEBTS       |              | 1225.00 |              | 1225.00 |          | 1225.00 |
| FEB. 82      | CASH        | 2600.00      |         | 2600.00      |         | 2600.00  |         |
| FEB. 83      | BANK        | 2550.00      |         | 2550.00      |         | 2550.00  |         |
| FEB. 84      | DEBTS       |              | 1275.00 |              | 1275.00 |          | 1275.00 |
| FEB. 85      | CASH        | 2700.00      |         | 2700.00      |         | 2700.00  |         |
| FEB. 86      | BANK        | 2650.00      |         | 2650.00      |         | 2650.00  |         |
| FEB. 87      | DEBTS       |              | 1325.00 |              | 1325.00 |          | 1325.00 |
| FEB. 88      | CASH        | 2800.00      |         | 2800.00      |         | 2800.00  |         |
| FEB. 89      | BANK        | 2750.00      |         | 2750.00      |         | 2750.00  |         |
| FEB. 90      | DEBTS       |              | 1375.00 |              | 1375.00 |          | 1375.00 |
| FEB. 91      | CASH        | 2900.00      |         | 2900.00      |         | 2900.00  |         |
| FEB. 92      | BANK        | 2850.00      |         | 2850.00      |         | 2850.00  |         |
| FEB. 93      | DEBTS       |              | 1425.00 |              | 1425.00 |          | 1425.00 |
| FEB. 94      | CASH        | 3000.00      |         | 3000.00      |         | 3000.00  |         |
| FEB. 95      | BANK        | 2950.00      |         | 2950.00      |         | 2950.00  |         |
| FEB. 96      | DEBTS       |              | 1475.00 |              | 1475.00 |          | 1475.00 |
| FEB. 97      | CASH        | 3100.00      |         | 3100.00      |         | 3100.00  |         |
| FEB. 98      | BANK        | 3050.00      |         | 3050.00      |         | 3050.00  |         |
| FEB. 99      | DEBTS       |              | 1525.00 |              | 1525.00 |          | 1525.00 |
| FEB. 100     | CASH        | 3200.00      |         | 3200.00      |         | 3200.00  |         |

Good old, plain white paper.

It wasn't pretty, but it got the work done.

Although there isn't a ready-made solution available, you're just a few hours of research away from getting what you need. CSRankings built the ranking system based on data from sources such as Google Scholar and DBLP, which are readily available for you to view. So if you were to do it yourself, first identify the professors whose research you find interesting from your department's research page. From there, you can navigate to the pages of these professors on the aforementioned aggregator sites to gain insight on their present and past work.

## STEM CERTIFICATION

Last but not the least, if you plan to pursue your graduate studies in the U.S., please check if your major is STEM certified.

I HAVE HEARD THIS **TERM** BEFORE,  
BUT WHAT DOES IT REALLY MEAN?



Glad you asked.



Every eligible graduate student in the U.S. gets a **12 month period post degree completion, called Optional Practical Training (OPT)**, to work with an eligible employer and learn on the job<sup>[36]</sup>. Here comes the best part: If you're an F1 student earning a degree in science, technology, engineering, or mathematics (STEM), you are eligible for a **24-month extension** on top of the 12 months received by everyone.

The Department of Homeland Security (DHS) states that<sup>[37]</sup>:

“ To qualify for a 24-month STEM OPT extension, an F-1 student participating in an initial period of regular post-completion OPT must:

- ▶ Have a degree in an eligible STEM field from a Student and Exchange Visitor Program (SEVP)-certified school that is accredited when the student submits their STEM OPT extension application to USCIS.
- ▶ Pursue their STEM OPT extension through an employer that is enrolled in USCIS's E-Verify



*employment eligibility verification program.*

- ▶ *Select a STEM OPT employer that provides the student with formal training and learning objectives.*
- ▶ *Work a minimum of 20 hours per week per employer.* ””

At this stage, you should only be concerned about point (a) that says your degree must be in an eligible STEM field from a school that is SEVP certified. If you're wondering how to get that information, you can easily find it on the DHS website<sup>[38]</sup>. This list is curated by the U.S. Department of Education's National Center for Education Statistics (NCES). This isn't a list set in stone however. They keep updating it and even mention that you can request for a degree to be added by emailing SEVP<sup>[39]</sup>.

## CAREER

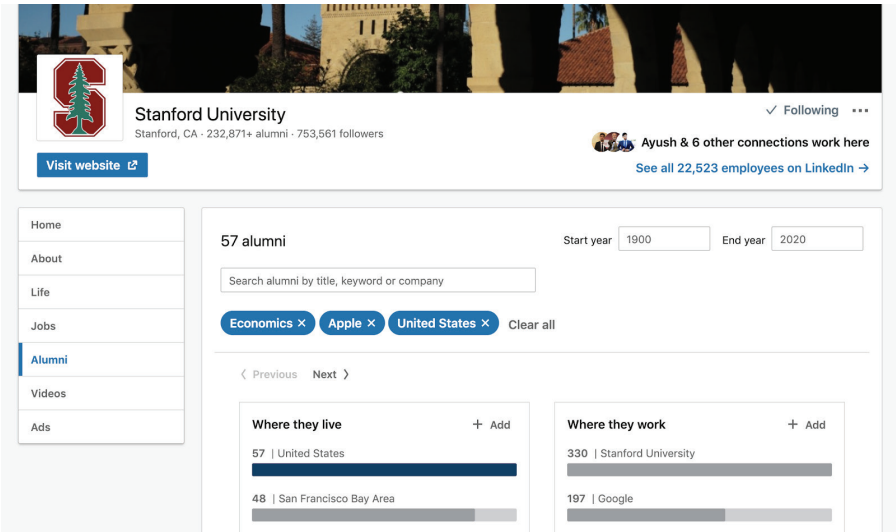
In an ideal world, universities would publish information on every alumni's job role, company, and salary in a massive database that can be queried. But in reality, this information is not available to the extent you would want since universities that don't have a great history tend to obfuscate this with less important data. For example, the Management Science and Engineering department at Columbia University does a reasonably good job of giving you all the numbers you need<sup>[40]</sup>. On the other hand, we couldn't find the data at all for the Computer Science department at Virginia Tech<sup>[41]</sup>. Nevertheless, your first layer of research should once again begin with your department's website.

Apart from spending time on the department site, we recommend resorting to platforms that pool this information. The professional networking site LinkedIn is your best bet here. We will detail best practices in creating a LinkedIn profile in Chapter 17, but for now, use it to collect data on the alumni.



LinkedIn lets you look at the alumni of any institution and glean some basic categorical information on **where they live, what they do, and what they majored in (among others)**<sup>[42]</sup>. You can also filter on these fields to, say, look for students who majored in economics at Stanford University and are currently working at Apple in the U.S.<sup>[43]</sup>.

Using LinkedIn, you can reasonably answer the question, *what are some of the common career paths a student follows after graduating from [university] with a degree in [major]?*



To find out details on the salary of a role, you can either use the inbuilt feature in LinkedIn<sup>[44]</sup> or resort to other platforms like PayScale<sup>[45]</sup> and Glassdoor<sup>[46]</sup> that also have this information.

## ❖ MISCELLANEOUS

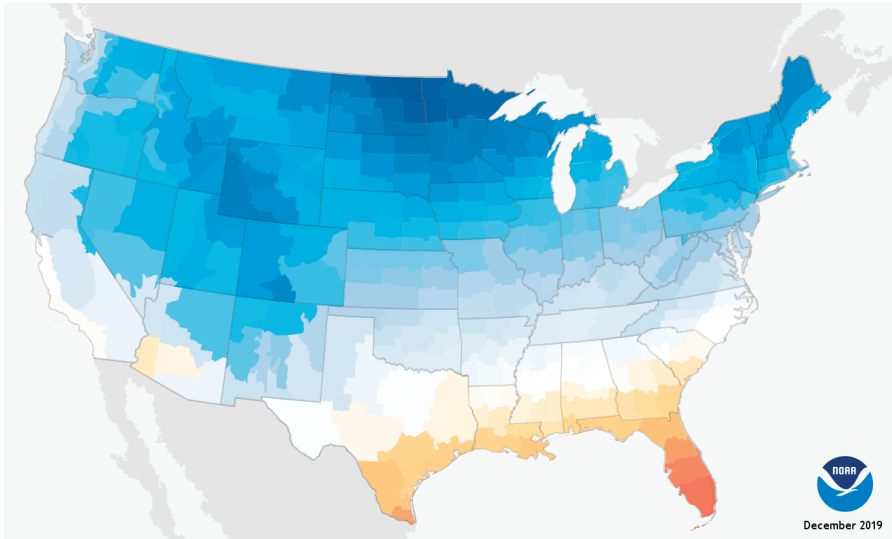
This could mean anything. But the most common factors we recommend you look at are the ranking, location, and living expenses.

Ranking, as we saw before, is not the best metric to measure your experience. However, it would be naïve on our part to suggest not looking at it. We recommend triaging your information by looking through the multiple ranking sites mentioned before: QS World Rankings, Times Higher Education Rankings, and the Academic Ranking of World Universities. Rather than looking at the overall ranking of a university, search for the ranks pertaining to your department wherever available.

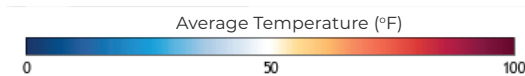
Location is an important part of your experience. If you're used to living in the city all your life, filled with bustling restaurants and theaters, it would be a difficult transition to study at a university that is situated deep in a rural area, such as Dartmouth College. On the flip side, someone who cherishes peace and quiet would be unnerved with the city that never sleeps, a.k.a New York.



Another good reason to check the location would be to understand the weather. The weather can go to extremes during winter in the U.S., as seen in the map below for the month of December, created by the National Oceanic and Atmospheric Administration<sup>[47]</sup>. Note that the temperatures are in Fahrenheit, not Celsius.



December 2019



Climate.gov  
Data: NCEI

Finally, you can get an estimate of your living expenses by using an online website calculator. At a first glance, the increase in the cost of living will certainly alarm you. In fact, it took me more than a year to stop converting USD to INR every time I purchased food or groceries. We can't stop you from going through that phase, but we can tell you that you don't just have a higher cost of living in the U.S., you will also have a higher salary and benefits. Eventually, it will balance out the cost. For example, there seems to be a 566% increase in the rent from Hyderabad to Seattle for a modest studio spanning 480 sqft<sup>[48]</sup>. While that estimate is true, it doesn't take into account the difference in average salary between both locations (which is in the order of 400%).

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The U.S. is indeed a more expensive country to live in; but not as much as you would think from a first glance.

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## OTHER RESOURCES

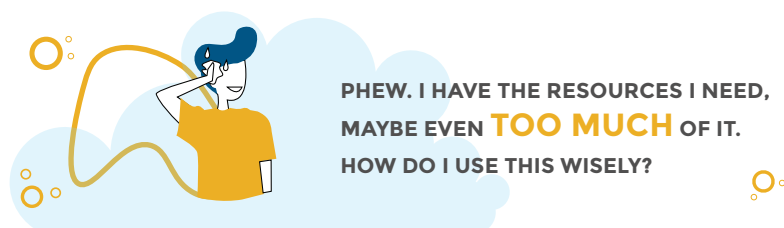
For all the quadrants above, the best way to get qualitative data is to reach out to your seniors and friends who've tread this path already. While reaching out to these individuals, always be respectful of their time. Rather than sending a LinkedIn invite and asking for a 30 minute phone call out of the blue, create a Google Doc with the list of questions you want to ask them and send over the link *after* they agree to help you out. This way, you get your questions answered at a time of their convenience without going through the hassle of scheduling a call (not to mention the ordeal of different time zones).

---

Because you want to be a satisficer, talk to no more than two current or past students per university at this point.

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Another less personal but more time-saving option is to comb through answers on Quora<sup>[49]</sup> and Reddit<sup>[50]</sup> which have dedicated spaces for past students to write about their experiences.



We totally get it. Collecting all of these resources sounds like too much of a hassle to apply to universities. You're thinking, *can I not just apply to the top ten universities from QS Rankings for my major?* But remember, we want you to be a *satisficer* right now. We don't expect you to go through every course description in detail and look at all alumni from a university.

—

All the resources should be used as a way to *eliminate* universities rather than *select* them.

—

Let’s switch back to the example of buying a house. In the beginning, you don’t go through every single listing on Zillow in detail and note down the features. Rather, you’re simply browsing through dozens of listings to eliminate the ones that *don’t* meet your minimum requirements. Which means you first need to create your set of minimum requirements. For a house, that might be the following: *I’m looking for all options that are under the budget of \$500,000, have two bedrooms and two bathrooms, and accept a down payment of 15%.*

We humans have gotten really good at making decisions as we evolved, because rather than looking at every single factor involved and optimizing for the best possible outcome, we opt for an approach that only looks at a few factors we deem to be important and attaches appropriate weight to them. Let’s do the same for narrowing down universities.

 **INTRODUCING YOUR BEST FRIEND**

Your best friend throughout this journey is not this book. Rather, it is a google sheet titled ***Dream Tracker*** that resides in the Resources folder we gave you access to. You will be using this sheet a *lot* as you read these chapters, so now is a good time to open it and explore the different components inside.

| School     | Major            | Link                                              | Application Deadline | Status      | SOP         | LOR          |
|------------|------------------|---------------------------------------------------|----------------------|-------------|-------------|--------------|
| School #1  | Engg. Management | Add link to the application form for easy access. | dd/mm/yyyy           | Not Started | Not Started | In Progress  |
| School #2  | Engg. Management |                                                   | dd/mm/yyyy           | Not Started | Not Started | In Progress  |
| School #3  | Industrial Engg. |                                                   | dd/mm/yyyy           | Not Started | Not Started | In Progress  |
| School #4  | Industrial Engg. |                                                   | dd/mm/yyyy           | In Progress | In Progress | In Progress  |
| School #5  | Computer Science |                                                   | dd/mm/yyyy           | In Progress | In Progress | All Received |
| School #6  | Computer Science |                                                   | dd/mm/yyyy           | Almost Comp | In Progress | In Progress  |
| School #7  | Mechanical Engg. |                                                   | dd/mm/yyyy           | Almost Comp | In Progress | In Progress  |
| School #8  | Mechanical Engg. |                                                   | dd/mm/yyyy           | Submitted!  | Complete    | In Progress  |
| School #9  | Creative Writing |                                                   | dd/mm/yyyy           | Submitted!  | Complete    | In Progress  |
| School #10 | Creative Writing |                                                   | dd/mm/yyyy           | Submitted!  | Complete    | In Progress  |



We know it gets chaotic very soon as you begin this process. To alleviate some of that, **we built a tracker** that you can use for various parts of your application: keeping track of applications, letters of recommendation, finances, scholarships, networking, estimating the loan amount, *and* choosing your universities.

If you open the *Choosing Universities* sheet in there, you will see a lot of columns with pre-populated numbers. We pretty much created a column for all the factors we went through so far in the chapter and assigned some dummy values. Now, your job is to turn these dummy values into meaningful scores that will help you make the decision.

| School    | Category | Requirement Satisfaction (Yes/No/NA) |     |       | Academia (1-5)   |                    |                    | Career (1-5)     |                 |                | Miscellaneous (1-5) |          |            | Total Score (on 40) |
|-----------|----------|--------------------------------------|-----|-------|------------------|--------------------|--------------------|------------------|-----------------|----------------|---------------------|----------|------------|---------------------|
|           |          | CGPA                                 | GRE | TOEFL | Course Relevance | Research Relevance | STEM Certification | Top Career Paths | Placement Stats | Average Salary | Ranking             | Location | What else? |                     |
|           |          | Weights                              |     |       | 1                | 1                  | N/A                | 1                | 1               | 1              | 1                   | 1        | 1          |                     |
| School #1 | Safe     | Yes                                  | Yes | Yes   | 3                | 3                  | Yes                | 3                | 3               | 3              | 3                   | 3        | 3          | 24                  |
| School #2 | Safe     | Yes                                  | Yes | Yes   | 3                | 3                  | Yes                | 3                | 3               | 3              | 3                   | 3        | 3          | 24                  |
| School #3 | Moderate | Yes                                  | Yes | Yes   | 3                | 3                  | Yes                | 3                | 3               | 3              | 3                   | 3        | 3          | 24                  |
| School #4 | Moderate | NA                                   | Yes | NA    | 3                | 3                  | No                 | 3                | 3               | 3              | 3                   | 3        | 3          | 24                  |
| School #5 | Moderate | Yes                                  | Yes | Yes   | 3                | 3                  | No                 | 3                | 3               | 3              | 3                   | 3        | 3          | 24                  |
| School #6 | Moderate | Yes                                  | Yes | Yes   | 3                | 3                  | No                 | 3                | 3               | 3              | 3                   | 3        | 3          | 24                  |
| School #7 | Dream    | Yes                                  | No  | Yes   | 3                | 3                  | Yes                | 3                | 3               | 3              | 3                   | 3        | 3          | 24                  |
| School #8 | Dream    | No                                   | No  | No    | 3                | 3                  | No                 | 3                | 3               | 3              | 3                   | 3        | 3          | 24                  |

## ✓ THE FIVE STEP ELIMINATION

### STEP 1: FIRST ROUND

First, we want you to collect a list of 20-25 universities for your major based on information from various ranking sites, seniors, and general research on Q&A forums.

Go through the *Requirements* for each university and populate *just* those columns in the sheet wherever you can.

Once you're done with that, eliminate all the universities where you don't satisfy the requirements. It's okay to keep two or three that you've dreamed of joining, but be sure to mark this appropriately in the *Category* column.

STEP 2: SETTING PRIORITIES

Now, we’ve got a list of universities you have a shot at (with a few *Dreams*).

Let’s take a step back and think about the *most* important thing that you care about for each factor under the quadrants *Academia*, *Career*, and *Miscellaneous*. The table below gives you an example.

| Quadrant | Factor           | What Matters                                                                  |
|----------|------------------|-------------------------------------------------------------------------------|
| Academia | Courses          | I want to study Computer Vision, Entrepreneurship, and Reinforcement Learning |
| Academia | Research         | I want to conduct research on human computer interaction (HCI)                |
| Career   | Top Career Paths | I want to become a Product Manager at an AR/VR company                        |
| Career   | Average Salary   | I want to earn \$100,000+ so I can pay back my loan within three years        |
| Misc     | Ranking          | I want my department to be within top 20 in that major                        |
| Misc     | Location         | I want to live in a metropolitan city                                         |



You don’t have to strictly adhere to the example above and have a requirement for each factor. You also don’t need to treat them all with equal importance. Think about which factor matters more to *you*.

For example, If you have always dreamt of living in Silicon Valley, it makes sense to place a higher weight on the location over the ranking.

So write down what matters most in each of the areas and then rank them according to your priorities. Once you’re done ranking them, assign appropriate weights in the row titled *Weights* in the *Dream Tracker*. We gave it all a weight of 1, but you should change it based on your preferences.



### STEP 3: SECOND ROUND

Now use all the tools we mentioned in this chapter to gather the data you need. Look over the list of universities you have currently and remove the ones that don't satisfy your requirement for each of the areas. For example, if taking a course and eventually specializing in human computer interaction is very important to you, then look at the course catalog and description of each university to eliminate the ones that don't offer it.

If you end up having to eliminate almost all the universities, then revisit the factors and only use the top two or three to eliminate. At the end of this exercise, you should be left with a list of approximately ten universities, give or take two.

### STEP 4: ASSIGNING SCORES

Finally, you can begin assigning scores to all the universities under each column. This is part objective, part subjective.

Taking the example of courses once again, dive deeper into the catalogue offered by each of the universities. Read the description, syllabus and takeaways if present. If the university offers specializations, then look through them and find out the ones that resonate with you.



As you're assigning the scores, here's an important tip: **stay away from 3**. Generally when a 1-5 scale is used, the most common response would be 3, since it's an easy way out when you're in a dilemma. However, it will also dilute your response. So, as much as possible, avoid assigning 3.

### STEP 5: FINAL ROUND

You have the pre-final list of universities, the weights, and the scores. What is

left is for you to categorize each of the universities as *Safe*, *Moderate* or *Dream*. This should be assigned based on the requirement specified by the university along with its reputation and general knowledge. We all know MIT is better than Miami University.

Once the categorization is complete, pick the top six to eight universities with a split of 1:2:1 (or close) with the *Safe*, *Moderate*, and *Dream* tag. For example, if you wish to apply to seven universities, then apply to the top two *Safe* ones, top three *Moderate* ones, and top two *Dream* ones.

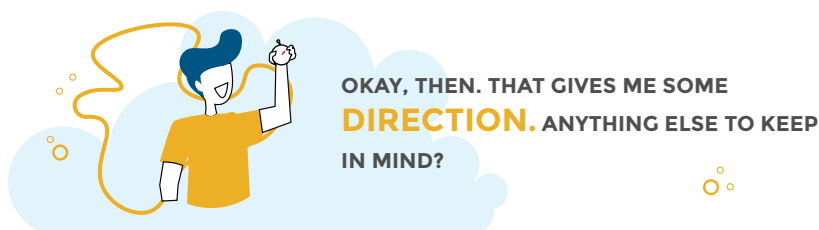
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We recommend not applying to more than eight universities.

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Why?

First, finishing an application takes a significant amount of time and effort. Having to do this amidst your already busy life should be taken into consideration. Second, if you picked your universities and chances right, you wouldn't *need* to apply to more than a few to know that you will get into one. Picking fewer will also let you allocate more time per university. Finally, each application carries a fee between \$50 to \$100. That could add up to over \$1000 if you don't limit yourself in this step.



Yes, just one final note! Each university you apply to expects you to submit either two or three letters of recommendation. On average, professors don't give out more than three letters. We will talk in detail about this in Chapter 8, but keep in mind the number of letters you would need as you apply to more universities.

With that, we've reached the end of one of the longer chapters in the book. We will revisit some of the concepts you learned in this chapter once again in Chapter 13 when you're tasked with making that final decision. You will then be immensely grateful to your past self for putting in the work right now. So begin the work needed to make the life of your future self a lot easier.

## CONCLUSION

Narrowing down the list of universities is difficult not because of a lack of information, but because of too much of it. This is why you need to follow the role of a satisficer, someone who settles for a *good enough* solution that meets a pre-set threshold. You can be a maximizer when the time comes to pick your dream university.

It is tempting to use ranking as a deal breaker while choosing universities. But, it is *not* a good representation of your experience. There are a plethora of other factors to consider. First, we divided these into four quadrants: requirements, academia, career, and miscellaneous. Next, we gave you the resources needed to obtain information for all these quadrants. And finally, most importantly, we walked you through a five step framework that you can use to do a pretty good job of narrowing down the universities from over 25 to under 8. The most important step here is to write down what matters the most to *you* in each of the factors and assign appropriate priority among them. This entire process should be thought of as one of elimination, rather than one of selection. We will revisit some of these concepts once again in Chapter 13 when you are tasked with picking your dream university.

With so many options out there, you will find it hard to reach a point when you feel the work is complete. That is why it's important to begin with a threshold on the number of applications, either based on financial constraints or other personal factors. If you've followed the structure we've detailed in the chapter closely, we can assure you that you can't go wrong.



## A LITTLE REFLECTION

- ▶ When was the last time you were a maximizer? A satisficer?
- ▶ What are the top three factors that matter the most to you during your graduate school experience?
- ▶ What are the top three factors that matter the least to you during your graduate school experience?
- ▶ Who are five seniors you can reach out to from different universities to get valuable insights?

## Chapter 04 BUILDING A BIG PICTURE

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---

*Mise en place.*

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It is French for *putting in place*.

That's what we were doing so far. In the late 19th century, after a long career in the French army as a gifted chef, Georges-Auguste Escoffier<sup>[1]</sup> returned home and began revolutionizing the traditional cooking methods in France. He took ideas from the disciplined regimen witnessed during his time in the military to bring order into the chaos that was present inside the kitchen of a restaurant. *Mise en place* (pronounced me-zohn plahs) is nothing but that.



It is to bring order to the act of cooking by collecting and arranging the ingredients and tools needed for cooking *before* you actually begin cooking<sup>[2]</sup>.

This term is now widespread and used as a noun, a verb, *and* a state of mind. Although the concept sounds simple, the reasons lurking behind it are many and have a profound reward<sup>[3]</sup>. By preparing the ingredients for a dish before beginning to cook it, you can ensure that there are no missing ingredients. You can group them together to form logical categories (based on the various steps involved to cook the dish) thus minimizing your cognitive load. You can also clean as you go through the steps, rather than make a giant mess that takes up the whole counter. We've all been there.

We've all been there.

This concept is widely followed by restaurants and contains a deeper meaning for chefs, some of whom even call it their religion. This is what Melissa Gray, from the Culinary Institute of America, says<sup>[4]</sup>,

“ I know people that have it tattooed on them. It really is a way of life [sic]... it's a way of concentrating your mind to only focus on the aspects that you need to be working on at that moment, to kind of rid yourself of distractions. ”

The concept is also so simple that it can be extended to other practices. Rather than cluttering your desk with items that have no order, you can categorize the items based on their usage (notepads and pencils on the right, water bottle and snacks on the left, etc).

---

In here, we *mise en place*-d in Part I (pardon the butchering of the word) so that you can focus solely on preparing the documents needed for each university before finally hitting the dreaded *submit* button in Part II.

---

However, that isn't to say you cannot or should not add or edit universities in your list if you have a good reason to do so. Even chefs change the ingredients

at times based on how the dish is turning out.

By now, you should have a clear picture of the universities that you are targeting, along with the major that will shape your life over the next few years. When someone asks you why you are choosing to study abroad, the response should be involuntary and firm. Before building any product, the team behind it first focuses on the *why*. The *why* takes precedence over the *how*, because without the *why*, you will end up building an iPhone to be used as a paperweight.

Now, before you move on to preparing the ingredients of your application, which is another *mise en place* as well, answer the following question,

\_\_\_\_\_

What other areas in your life can you adopt this idea in?

\_\_\_\_\_





# Chapter 05

## PREPARING FOR COMPETITIVE EXAMS

Time to begin burning  
the midnight oil, again



Dr. Quentin D. Atkinson<sup>[1]</sup>, a professor at the School of Psychology in the University of Auckland, New Zealand, posited an interesting theory in 2011 that the origin of modern human language occurred in Africa, and then percolated to the rest of the world slowly alongside human migration<sup>[2]</sup>. He used statistical models to look at the number of phonemes across 504 languages in the world.



Think of a phoneme as the **smallest unit of sound in a word that distinguishes it** from another. *Pat* is different from *cat* because the phoneme *p* replaces *c*.

He found that some languages spoken in Africa had over a hundred of these. On the other hand, English has 44 phonemes, and languages spoken in New Zealand, argued to be the final leg of human migration out of Africa, have just 13<sup>[3]</sup>.

Yet, the theory still does not answer the question of how language was born in the first place. Did it happen due to a mutation in our brain about 100,000 years ago? Or was it a slow process that took millions of years to mature? The truth is, we don't know. We have some strong theories proposed by archaeologists, biologists, and historians. However, none of them are universally accepted.

According to Dr. Dean Falk<sup>[4]</sup>, an expert in neuroanthropology, language was initially developed by mothers to reassure their babies that they were not being abandoned, by making facial expressions and calls which eventually became a form of speech. She calls it *putting the baby down* theory<sup>[5]</sup>. On the other hand, Dr. Avram Chomsky<sup>[6]</sup>, sometimes referred to as the *father of modern linguistics*, takes a more simplistic, yet controversial, view stating that a small mutation in the gene of one individual gave them the ability to have

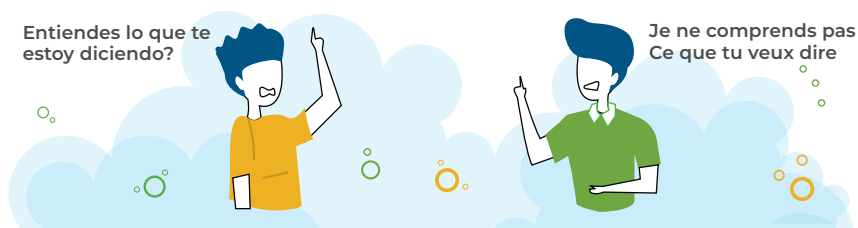
complex thoughts and superior planning skills, with language emerging as a by-product. He says this spread to the rest of humankind over the next thousands of years. Of course, not everyone buys into it<sup>[7]</sup>.

---

It is fascinating that we know with certainty so little about  
the origin of language, and yet today,  
life seems impossible without it.

---

Playing a simple game of charades where your teammate fails to understand the most basic hand signals is enough to appreciate the necessity of language *that is mutually understood*. It would serve no purpose for you to learn Japanese and then travel to India. The value of language, and by extension, speech, can only be realized when the other party is able to comprehend the sound vibrations you make using your larynx that reaches their auditory nerve fibers with the help of the hair cells that convert sound waves into electrical signals<sup>[8]</sup>. And vice versa.



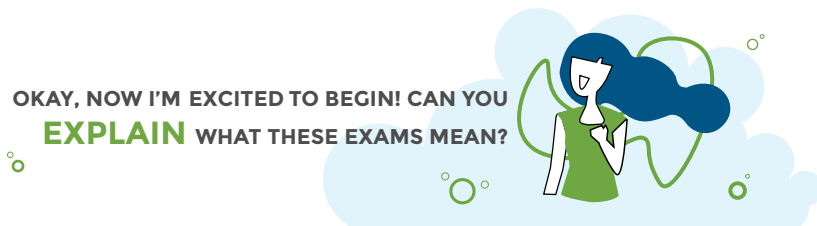
This is what the language proficiency exams help you with. GRE, GMAT, TOEFL, IELTS, and the likes are all mechanisms that test your vocabulary, logical reasoning, and quantitative skills. They help you participate in conversations and discussions when you travel to a new country or meet someone visiting your own country. As we mentioned earlier, most universities use these tests as a way to screen students in the first round even before they read your application and essays.

---

These exams are not another hurdle in your journey.  
They are the invisible enablers that push you to prepare  
so you can reap the rewards later on.

---

OKAY, NOW I'M EXCITED TO BEGIN! CAN YOU  
**EXPLAIN** WHAT THESE EXAMS MEAN?



Sure. First, you need to narrow down the exams to be taken from the table below.

| Exam                                                  | Purpose                                           | # Universities accepting test score                 | # Countries accepting test score       |
|-------------------------------------------------------|---------------------------------------------------|-----------------------------------------------------|----------------------------------------|
| Graduate Management Admission Test (GMAT)             | For business schools                              | 2,100+                                              | 110+                                   |
| Graduate Record Examinations (GRE)                    | For liberal arts, science, math, business schools | 10,000+<br>(1,200+ business schools)                | 160+                                   |
| Test of English as a Foreign Language (TOEFL)         | For programs delivered in English                 | 10,000+                                             | 150+                                   |
| International English Language Testing System (IELTS) | For programs delivered in English                 | 2,000+Including<br>9,000+ professional institutions | 140+(preferred over TOEFL in the U.K.) |
| Law School Admission Testing Program (LSAT)           | For law schools                                   | 300+                                                | USA, Canada, Australia                 |
| Medical College Admission Test (MCAT)                 | For medical schools                               | 130+                                                | USA                                    |
| Pharmacy College Admission Test (PCAT)                | For pharmacy schools                              | 50+                                                 | USA                                    |
| Dental Admission Testing Program (DAT)                | For dental schools                                | 75+                                                 | USA, Canada                            |

**Note:** Some schools, like Purdue<sup>[9]</sup>, may also require you to take additional language proficiency tests if you wish to apply to a prospective teaching assistantship post admission.

## EXAMINER, REFEREE, JUDGE

We cannot cover all the exams, since that would require a separate book in itself. To balance providing guidance while keeping the book within scope, we will use this chapter to walk through the resources needed, approaches to be taken, and techniques to remember what you read for the GRE and TOEFL exams. Both of these are administered by the *Educational Testing Service (ETS)*, which is the world's largest private non-profit of its kind<sup>[10]</sup>.

The GRE began as an experiment concocted by the deans from four Ivy League universities and the Carnegie Foundation for the Advancement of Teaching in 1936<sup>[11]</sup>. Over the next decade, it was used by a few universities in the U.S. before getting adopted officially by the ETS as a standard assessment in 1949. However, we would need to wait until 1965 for the birth of TOEFL, which began as another experiment by an applied linguistics professor at Stanford University<sup>[12]</sup>.



Today, the GRE is requested by and accepted by more than **4,500 institutions** just in the United States<sup>[13]</sup>. If you weren't aware, over **1,200 business schools** also accept GRE scores as an alternative to GMAT<sup>[14]</sup>.

However, if you choose to pursue your MBA abroad, we recommend taking the GMAT since it is specifically targeted at that degree and helps with your job search if you have a commendable score. It is also the exam taken by more than 90% of business school aspirants<sup>[15]</sup>.



TOEFL is even more popular. It is accepted by **all universities in the U.S., Canada, Australia, New Zealand**, and in over 98% of universities in the U.K. (where IELTS is preferred)<sup>[16]</sup>.

ETS lets you do a quick check for yourself to see if your desired university accepts TOEFL scores<sup>[17]</sup>.

## RULES OF THE GAME

### GRE

The GRE is an exhausting test that spans almost 4 hours, and has six parts made up of two each of the verbal reasoning (30 minutes), quantitative reasoning (35 minutes), and analytical writing sections (30 minutes) with a ten minute break after the third part. The verbal reasoning section has three sub-categories: reading comprehension, sentence equivalence, and text completion<sup>[18]</sup>. The quantitative reasoning section tests you on basic mathematical knowledge and your ability to reason with that.

Both the verbal and quant sections score you on a scale of 130 to 170, which is then added up at the end to give you a total score out of 340. Analytical Writing Assessment, or AWA, on the other hand scores you on a scale of 6 with half point increments.



Did you notice that the six sections only add up to 3 hours and 10 minutes? If you did, you're right to be confused. **There is a seventh section in the GRE**, which could either be verbal or quantitative reasoning, depending on your luck that day. This is **known as the *experimental* section.**

This *unscored* section is used by the examiners for research purposes. However, you would not know which of the sections is the dummy one. Did we mention it's unscored? It's frustrating, we know.

TOEFL

The TOEFL is slightly more merciful and caps at 3 hours with four sections that test your reading, writing, speaking, and listening skills with a ten minute break after the second part. Unlike the GRE, each section here takes up different times, with reading being the longest taking up to 72 minutes<sup>[19]</sup>. Also unlike the GRE, there are no unscored hidden agendas in TOEFL.

All four sections score you on a scale of 0 to 30, which is all added up at the end to give you a total score out of 120.

To help you get started, the table below contains a list of official and unofficial resources recommended by us based on experience and observation.

 OFFICIAL (AND UNOFFICIAL) RESOURCES

| Test          | Official                                 | Unofficial                                                                                                                                |
|---------------|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| GRE (overall) | ETS Official<br>POWERPREP Practice Tests | Manhattan Prep: 5 lb. Book of GRE Practice Problems<br>Kaplan GRE Practice Tests <sup>[20]</sup><br><b>Apps:</b> Ready4GRE, ManhattanPrep |
|               |                                          |                                                                                                                                           |
|               |                                          |                                                                                                                                           |
| GRE Verbal    | ETS GRE Verbal Reasoning                 | <b>Overall</b><br>Kaplan's GRE Verbal Workbook                                                                                            |
|               |                                          | <b>Vocabulary Building</b><br>Flashcard Apps:<br>Pixnary, Magoosh, Quizlet                                                                |
|               |                                          | <b>Reading Comprehension</b><br>Science: Scientific American<br>Business: The Economist<br>Op-Ed: Arts & Letters Daily                    |

|                  |                                                                                                                                                     |                                                                                                                                                                                   |
|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>GRE Quant</b> | <p>ETS GRE Quantitative Reasoning Practice</p> <p>ETS Math Review<sup>[21]</sup></p> <p>ETS Mathematical Conventions<sup>[22]</sup></p>             | <p>Kaplan's GRE Math Workbook</p> <p>Khan Academy videos (recommended by ETS)<sup>[23]</sup></p> <p><b>App:</b> GRE Prep by Varsity Tutors<sup>[24]</sup></p>                     |
| <b>GRE AWA</b>   | <p>ETS List of Issue and Argument Questions<sup>[25][26]</sup></p> <p>ETS Sample Essay Responses for Issue and Argument Task<sup>[27][28]</sup></p> | <p>Analytical Writing Module by Greenlight<sup>[29]</sup></p>                                                                                                                     |
| <b>TOEFL</b>     | <p>ETS The Official Guide To The TOEFL Test</p> <p>TOEFL iBT Interactive Sampler<sup>[30]</sup></p>                                                 | <p><b>Overall</b></p> <p>NoteFull: Self-study training<sup>[34]</sup></p> <p>YouTube channel: NoteFull TOEFL mastery<sup>[35]</sup></p>                                           |
|                  | <p>TOEFL iBT Free Practice Test<sup>[31]</sup></p> <p>ETS Official TOEFL iBT Tests<sup>[32]</sup> (e-book)</p> <p>TOEFL Go! Official App</p>        | <p><b>Speaking</b></p> <p>Language learning groups on Meetup<sup>[36]</sup></p> <p><b>App:</b> Duolingo (language learning)</p> <p>Conversations with native English speakers</p> |
|                  | <p>TOEFL Practice Online (TPO) Test<sup>[33]</sup></p>                                                                                              | <p><b>Listening</b></p> <p>YouTube videos on various accents<sup>[37]</sup></p>                                                                                                   |

Note that the above resources are only to help you think on the right track. In most cases, the official resources, along with a lot of practice (and a few unofficial resources) are enough.



We recommend taking the GRE before the TOEFL, since the latter involves a lot of the concepts you will learn in the former, and is considered a considerably easier exam. As exhausting as the exam day might be for both of them, the preparation for these tests *can* be fun, if you want them to be.



Ah, that might have to wait just a little longer. Before you begin your preparation for either of the exams, it's important for you to take a test first and see where you stand.

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Before you decide to summit that mountain peak you see in the distance, you first need to know where you stand and how prepared you are, so you know what to expect.

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Consider these exams to be your summit. Websites like Princeton Review and Manhattan offer the ability for you to take a free test, also known as a *diagnostic test* (or more colloquially, *mock test*) so you can first assess where you stand today.

We also recommend utilizing one out of the *two* free tests offered by ETS for GRE<sup>[38]</sup>. ETS also offers one free practice test for TOEFL, but you won't get your scores for the speaking and writing sections since that requires a human to evaluate. You will still get to see the sample responses.

Once you are done taking the test, let the scores sink in. If you feel like you did not meet your expectations, that's completely okay! In fact, you are not supposed to. If you did, you wouldn't be motivated to practice and we would be sad that the rest of this chapter won't be of use to you.

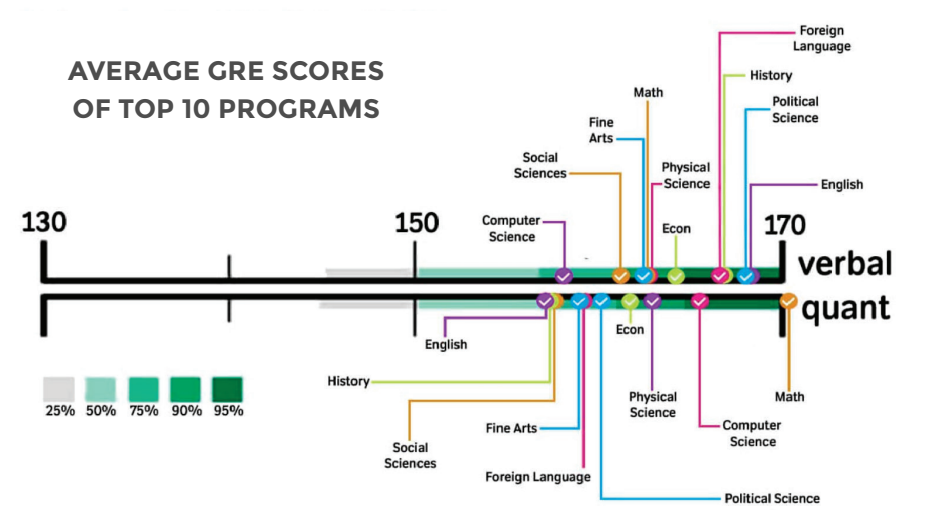


# BRACE YOURSELF: DATA OVERLOAD

At this point, you might wonder what a *good* score is. It is impossible to objectively state that, but it is very possible to make some sweeping generalizations based on past admits.

## GRE

First off, this image is a bird’s eye view of the average GRE scores for the ten most sought after graduate programs created by Magoosh<sup>[39]</sup>.



Speaking about making sweeping observations from past admits, here is how Kaplan categorizes historical GRE score data into four ranges<sup>[40]</sup>. It is possible that you may fall in different categories for all the three sections.

|                    | Verbal Reasoning | Quantitative reasoning | Analytical Writing |
|--------------------|------------------|------------------------|--------------------|
| Top Scores         | 163-170          | 165-170                | 5.0-6.0            |
| Competitive Scores | 158-162          | 159-164                | 4.5                |
| Good Scores        | 152-157          | 153-158                | 4.0                |
| Average Scores     | 151 or below     | 152 or below           | 3.5 or below       |

We also created our own table based on data published by ETS of test takers who wrote their GRE exams between July 1st, 2015 and June 30th, 2018<sup>[41]</sup>. Rather than specifying the range, the table shows the mean and the first standard deviation of the scores for all three sections, across some popular majors. Each major had at least 5000 test takers, to account for the law of large numbers<sup>[42]</sup>.

| Intended Graduate Major           | Verbal Reasoning |    | Quantitative Reasoning |    | Analytical Writing |     |
|-----------------------------------|------------------|----|------------------------|----|--------------------|-----|
|                                   | Mean             | SD | Mean                   | SD | Mean               | SD  |
| Computer and Information Sciences | 148              | 9  | 158                    | 9  | 3.3                | 0.8 |
| Chemical Engineering              | 152              | 8  | 161                    | 6  | 3.7                | 0.8 |
| Civil Engineering                 | 148              | 9  | 158                    | 8  | 3.3                | 0.9 |
| Electrical and Electronics Engg.  | 148              | 9  | 159                    | 8  | 3.2                | 0.8 |
| Industrial Engineering            | 149              | 8  | 159                    | 8  | 3.4                | 0.7 |
| Materials Engineering             | 153              | 8  | 162                    | 6  | 3.6                | 0.8 |
| Mechanical Engineering            | 149              | 9  | 159                    | 8  | 3.3                | 0.8 |
| Engineering - Others              | 153              | 9  | 160                    | 7  | 3.8                | 0.8 |

## TOEFL

For TOEFL on the other hand, ETS has provided a range of scores along with their corresponding expertise levels<sup>[43]</sup>.

| TOEFL iBT Levels  | Reading | Listening | Speaking | Writing |
|-------------------|---------|-----------|----------|---------|
| Basic             | 0-3     | 0-8       | 0-15     | 0-12    |
| Low-Intermediate  | 4-17    | 9-16      | 16-19    | 13-16   |
| High-Intermediate | 18-23   | 17-21     | 20-24    | 17-23   |
| Advanced          | 24-30   | 22-30     | 25-30    | 24-30   |

Like GRE, ETS also released the score data for TOEFL. This data is based on the test-takers who took it between January and December 2017. The following table provides the percentile ranks for test-takers who intended to become graduate level students in non-business programs, primarily engineering<sup>[44]</sup>. Let’s look at an example. Consider a *Scale Score* of 28 in the first column. The corresponding row indicates the percentage of students who scored below 28 in each of the sections. You can see that 78% of the test takers scored less than 28 in the *Reading* section while 94% of the test takers scored less than 28 under the *Speaking* section. If one scored 28 in all the sections, giving a total of 112 upon 120, the data shows that 95% of the test takers scored less than him/her.

| Scale Score | Reading | Listening | Speaking | Writing | Total Scale Score | Percentile Rank |
|-------------|---------|-----------|----------|---------|-------------------|-----------------|
| 30          | 94      | 94        | 99       | 99      | 120               | 100             |
| 29          | 86      | 88        | 97       | 96      | 116               | 99              |
| 28          | 78      | 82        | 94       | 92      | 112               | 95              |
| 27          | 71      | 75        | 90       | 86      | 108               | 90              |
| 26          | 64      | 69        | 84       | 82      | 104               | 83              |
| 25          | 57      | 63        | **       | 74      | 100               | 75              |
| 24          | 51      | 57        | 76       | 65      | 96                | 66              |
| 23          | 45      | 51        | 63       | 58      | 92                | 57              |
| 22          | 40      | 45        | 50       | 48      | 88                | 48              |



Most graduate programs and departments set their own TOEFL requirements. Usually, these will either match or exceed the university’s required minimum.

You can also use *admits.fyi*—the database of past admits and rejects we introduced in Chapter 3—to look at the GRE and TOEFL scores of past graduates to get a sense of the baseline.



Now that you know what a good vs great score is, set your goal.  
Is it 320? 330? 340 perhaps?

It's okay to set 340 as the goal, but know that no school would have that as a threshold. The highest threshold that a university has would be 330, where the verbal-quant split would depend on the major. It's also worth browsing through the websites of your target universities looking for a cut-off.

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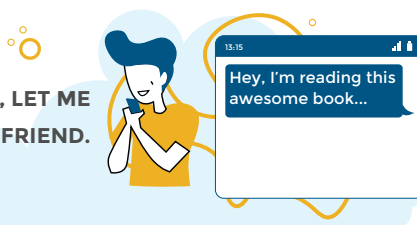
Whatever goal you end up setting, you need to begin  
with the end in mind.

If you don't know what score you want to get, you won't know  
how much time you need to allocate to prepare.

---

So, have you set a goal? Wonderful. We would even say go a step further and send a message to your friend stating this goal, so you have external accountability. The time has come to *finally begin your practice*.

ALRIGHT, LET'S BEGIN. BUT FIRST, LET ME  
JUST SEND A QUICK **TEXT** TO MY FRIEND.



Nice, that's the spirit!

Prepscholar specifies that it takes 40 hours to improve one's score by 5 points overall<sup>[45]</sup>. That's equivalent to spending 1 hour and 20 minutes everyday for a month. But we came across many posts of students who say they improved their score by 15 *points* in a month by putting in the same number of hours<sup>[46]</sup>.

In the end, what separates such outliers from the average crowd is not *what* they study, rather *how* they study it.

We won't prescribe a 30-day or 60-day plan for you here since that has already been done by numerous corporations<sup>[47][48]</sup> that provide study materials. If that isn't enough, there are detailed blog posts by past students who took the exam, like the one by Dan Mahr<sup>[49]</sup> who managed to score an eye-popping 339 in GRE after seven weeks of preparation. Instead, we will expand on the *approach* you should follow as you begin to prepare, that will set you apart from the crowd.



## CONSISTENCY IS KEY

People say practice makes perfect. Not true. We say *everyday* practice makes perfect. This is thanks to two phenomena that happen in your brain: **Myelination** and **Slow-Wave Sleep**. Let's take a small detour into the world of neuroscience.

Some people treat their brain as this mysterious, magical three-pound black box that takes in information from the world and spits out thoughts and words. That was a fair estimate maybe a few hundred years ago, but not anymore. We have learnt enough about the brain in the past two centuries to develop cures for diseases such as Parkinson's, epilepsy, insomnia, certain brain tumors, ADHD, and more<sup>[50]</sup>. We know enough about the brain to decipher what song someone is listening to by simply using non-invasive devices<sup>[51]</sup>. And we also know enough to see what exactly happens when we learn a new piece of information<sup>[52]</sup>.

Every thought you're having right now is being electrochemically powered by almost 100 billion neurons that are firing chemicals called neurotransmitters. You have probably heard about the neurotransmitter *dopamine*.



When you listen to your favorite song or eat food that you crave, dopamine gets released in your brain and makes you feel rewarded enough to seek out that activity once more<sup>[53]</sup>. Like dopamine, your brain has over **200 identified neurotransmitters**.

These neurotransmitters are released by the axon terminal of one neuron to the dendrite of another through a bridge called the synapse. If the neuron were a person, the axon would be their body and the dendrite the top of their head. While the information in our brain travels pretty quickly already, **myelination** helps increase the speed further.

Let's say you're dying to become a guitar maestro. When you begin playing the guitar on day one, a specific set of neurons fire together to make that happen. As the days pass by and as your fingers begin to bleed, the set of neurons that tend to fire together are slowly becoming best friends. As they fire more and more together, eventually, they end up conveying the information *faster* because of something called the myelin sheath. The myelin sheath is the coating around the axon<sup>[54]</sup> (akin to a warm clothing around the neuron-person). This coating is made up of proteins and lipids and slowly starts wrapping around the axon as it repeatedly fires. By doing so, the neurotransmitter can now travel through the axon body much faster, with lesser distraction.

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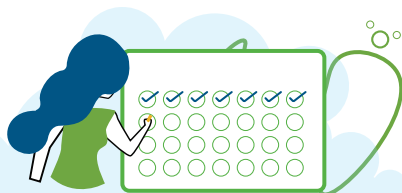
How do you improve the myelin content around the axons?  
Through *consistent* practice.

---

Researchers compared the brain scans between expert musicians and ordinary people, and found that there was a direct correlation between practice and the amount of myelin<sup>[55]</sup>. The more someone practiced, the more

myelin content their brain had. The same applies to your GRE and TOEFL practice, and pretty much any skill you want to master. Rather than cramming five days' worth of content in one day, spread out your practice so you trigger the set of neurons required more often. And they'll do the rest for you.

OKAY, I HAVE BEGUN PRACTICING  
**EVERYDAY.** BUT WHAT DOES  
THIS HAVE TO DO WITH **SLEEP?**



Myelin helps you learn faster whereas sleep helps you *retain* what you learnt. Sleep fascinated scientists for a long time, but without the right tools to peer into a brain, they couldn't explain much of what happened. Then 1953 saw a major breakthrough. Sleep was not a passive, homogenous process anymore.



Eugene Aserinsky, then a doctorate student, found out that sleep involved rapid eye movements, especially when his subjects were dreaming<sup>[56]</sup>. This gave rise to the **REM cycle** we all hear about now. Soon enough, another cycle, one that is quieter and gentler, called the **non-REM (or NREM)**, was discovered in 1968<sup>[57]</sup>. The NREM cycle was further divided into four stages, and then reduced to three in 2007. **One of these three stages, Stage 3, is called the slow-wave sleep (SWS) stage.** You might have come across this term through its more popular alias, *deep sleep*.

Deep sleep has the highest arousal thresholds, meaning it is hardest to wake someone up when they are in this stage of sleep. And if you do manage to wake them up, they would feel extremely groggy (and grumpy). If you were sleep deprived for a week and finally got a good eight hours in, researchers



would see a spike in your deep sleep levels, an indication that this is the stage much needed to make you feel refreshed<sup>[58]</sup>. And this stage is also popular for another key function: **memory**.

When you're asleep and enter stage 3 of the NREM cycle somewhere in the first half of the night, something mysterious and magical begins to occur between two parts of your brain. Your neocortex, the most advanced part of your brain that differentiates you from a chimpanzee, starts to originate *slow oscillations*. A few inches away, in the temporal lobe, your hippocampus, a seahorse-like structure that helps with memory (among other things), repeatedly re-activates the information that got encoded in your brain the day prior<sup>[59]</sup>. Slowly, there is a movement of this newly encoded memory from your hippocampus to your neocortex, where some of it gets stored for the long-term (with repeated practice, which we'll get to soon).

---

It is as if your hippocampus is re-enacting the information you learnt the previous day like a movie, and your neocortex is watching this with rapt attention, and encoding it in its own memory system.

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Sadly, people gravely underestimate the importance of sleep. So much so that the Centre for Disease and Control **declared sleep disorders to be a public health crisis in 2018**<sup>[60]</sup>.

We know many of you have indulged in all-nighters for exams. We did too. However, the GRE and TOEFL are not your typical exams that can be mastered overnight. It requires learning a *monumental* amount of information and rigorous practice. Don't underestimate the importance of sleep here.

If you are looking to improve yours, below are some proven methods:

- ▶ Sticking to a routine—something your brain really likes
- ▶ Staying away from your phone and laptop screen for an hour, just before you sleep
- ▶ Eating dinner that is low in carbs (meaning no rice, bread, or lentils)
- ▶ Setting your room temperature to 20 degree celsius
- ▶ Tracking your sleep via external devices (such as a FitBit or an Oura ring)<sup>[61]</sup>

More specifically, SWS is known to help with declarative memory, which involves learning non-emotional facts and concepts<sup>[62]</sup>. You know, similar to learning vocabulary words and mathematical concepts for your GRE and TOEFL.

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So, long story short, with a combination of  
daily practice and sufficient sleep,  
you will be able to ace your exams.

---



## REMEMBER, REMEMBER

We know there is a *lot* to remember with these types of exams. Guess what though? We also know a *lot* about how our brain works, which can be used to our advantage. Enter, mnemonic systems<sup>[63]</sup>.

“ A **mnemonic** (*m is silent*) device, or a **memory device**, is any learning technique that aids information retention or retrieval (remembering) in the human memory. Mnemonics make use of elaborative encoding, retrieval cues, and imagery

*as specific tools to encode any given information in a way that allows for efficient storage and retrieval. Mnemonics aid original information in becoming associated with something more accessible or meaningful—which, in turn, provides better retention of the information. ”*

The oldest known mnemonic technique is called the method of loci<sup>[64]</sup> (pronounced low-sigh), where loci is the plural of the word locus, meaning *place*. You might have heard of this as the *mind palace* technique if you're a Sherlock Holmes fanatic.



The **method of loci** posits that to remember a series of abstract words, you need to attach them to different spaces inside a location that you are very familiar with.

The legend goes that this was first put to practice by a poet named Simonides of Ceos, who was the only survivor of a building collapse during a dinner he attended. This was during the Roman Empire, more than 2000 years ago. Simonides was able to identify the dead, who were crushed beyond recognition, by remembering where the guests had been sitting<sup>[64]</sup>.



The next time your parents ask you to go grocery shopping, don't write down the items on a paper or into your phone. Rather, go to the entrance of your home and slowly begin walking inside. Attach every item to be bought to a specific *checkpoint* in your home, like a TV set or a kitchen sink. To make it easier, try to visualize a scene involving the item. If one of the items were toothpaste, imagine your sibling brushing their teeth as you walk

through the bathroom. Once you're done, do a mental walkthrough of your home and recollect each of the items. You will be surprised at how effective you are at remembering abstract words and facts by linking them to a place of choice.

Of course, we know you cannot do this for the thousand words that you learn for your exams. The point is, you will be able to retain and recollect better if you use one of the well-established mnemonic techniques as you learn a large amount of information. A few are mentioned below:

## IMAGERY

This is the most obvious one. Whenever you can, try to link a word to a mental image that your mind generates of it. Let's take the word *cupidity*. It's hard not to think about a cupid flying around with a bow and arrow when you hear this word. That's good! Now, instead of thinking of a smiling and loving creature, imagine it to be filled with greed because of all the love floating around. That's it. Cupidity means greed for money or possessions. The next time you see the word, your mind will be primed to think about a greedy cupid. Try to do this for as many words as you can<sup>[65]</sup>.

## CHUNKING

Do you notice that when you're reciting someone's phone number, you always chunk the digits together in groups of three or four? It's not 9479286724, rather, 947 928 6724. This doesn't have to stop with phone numbers. We can extend this to vocabulary. When you see two words that seem related, try to form a mental association between them so when you think of one, the other comes to mind. For example, the words *extinct* and *extant* have opposite meanings. If you learn to chunk such words together in memory, knowing the meaning of one will help you recollect the meaning of the other.

## READING

That's right. Learning new words and facts will stay reluctantly in your memory, trying to constantly escape. However, if you begin reading rich diction where there is a high probability of finding the words you learnt, you will experience a brief sense of joy (*I know that word!*) which will register that word stronger in your memory. Why? Now you have context surrounding the word. We don't forget words like apple and tree because we come across them on a daily basis. So use the unofficial resources we mentioned in the table earlier to read long articles. This will also serve you well with your reading comprehension sections.

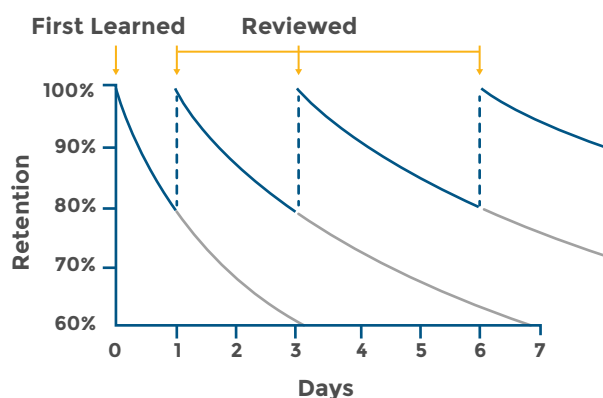
## SPACED REPETITION

This is not a mnemonic technique per se, rather a method to retain what you learnt for the long-term. It has a fancy name for a simple concept: you remember things better the more times you come across it. The trick here lies in the frequency of revision, according to Gwern Branwen, an independent research and long-form writer<sup>[66]</sup>.

“ [Spaced repetition] essentially says that if you have a question (“What is the fifth letter in this random sequence you learned?”), and you can only study it, say, 5 times, then your memory of the answer (‘e’) will be strongest if you spread your 5 tries out over a long period of time – days, weeks, and months. One of the worst things you can do is blow your 5 tries within a day or two. You can think of the ‘forgetting curve’ as being like a chart of a radioactive half-life: each review bumps your memory up in strength 50% of the chart, say, but review doesn’t do much in the early days because the memory simply hasn’t decayed much! ”

When you learn the word *hegemony* for the first time today, you should not review it every day for the next five days to retain its meaning. Rather, you need to space it out so that you review it *exactly* when you're about to forget it, as shown by the forgetting curve below. This way, you will also reduce the number of words to be reviewed everyday.

### FORGETTING CURVE FOR NEWLY LEARNED INFORMATION



Now, you must be thinking, *how will I know when I'm about to forget something?* You don't. That's where technology can help.

There is a software called Anki<sup>[67]</sup> that lets you create flashcards and displays them to you at intervals set by the algorithm (following the spaced repetition technique). When you review a flashcard, you can choose options such as *hard*, *good*, and *easy* which sends the app feedback to show you at the right intervals. If that is too much work for you, you can always use ready-made flashcards by apps such as Quizlet and Chegg that contain the word and meaning, but don't necessarily implement the spaced repetition technique.



For the AWA and writing sections, pick one of the 200 questions provided by ETS and time yourself to write the response once every few days. Unless you're a frequent blogger, it's not

natural or easy for someone to write a cohesive response to a question without practice. **Among all the new words and concepts you're learning and practicing everyday, don't lose sight of the writing (and speaking) sections.**

## KEEP TESTING YOURSELF

This goes without saying. Practicing without testing is akin to wandering in a maze with no idea as to where you're going.

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You can't improve something you can't measure.

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If you have one month before your exam, you should take a test every five days, or at least once a week. This is so you can monitor your progress *and* get acquainted with the act of sitting in the same location for four hours and thinking critically.



**First**, even before you begin your practice, create a list of links with all the free practice tests you can find online for GRE<sup>[68]</sup> and TOEFL<sup>[69]</sup>.

Get this out of your way at the beginning when you're conducting all the research to collect resources. Based on the number of weeks you have before your actual exam, allocate one test for every five days, or every week if you have more than a month to prepare. Ideally, you should spend the day before the main exam either relaxing or doing some very light review of your material.



**Second**, when you are actually taking the test, try your best to simulate the test day environment by keeping your phone away and sitting in a quiet room.

As you read before, both the GRE and TOEFL give you a one-minute break after each section except the third one (or during the half-time), where you can take a ten-minute break. Do your best to follow the same schedule, and use the ten minutes to go to the restroom or eat a protein bar. Strictly stay away from your phone, close all the other applications on your laptop, and mute notifications<sup>[70]</sup>. If you take practice tests that don't have an inbuilt timer, it's very important that you time yourself using a stopwatch (preferably *not* your phone).



**Finally**, take time to go over the results of each test to identify the places you were right, and wrong.

Remember *Dangal*, the biographical drama film about how a father trains his two daughters to become world-class wrestling champions? When Aamir Khan, who portrays the protagonist and father, sets out on a mission to improve his daughter's performance, what does he do? He finds a way to watch all the previous recordings of her fights and notes down the moments where she committed rookie mistakes. He then asks her to watch the same recordings and points the mistakes out to her, so she can avoid them the next time. Assuming this scene mirrored the true story well, that was the turning point in her career.

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We're asking you to be your own Aamir Khan.

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Go through the results of every single test to understand your pitfalls. If you see most errors taking place in the text completion section under verbal, it means you haven't memorized the words and their meanings as well as you thought you did. Open a sheet and note down the feedback you have for yourself based on that test. Try being as detailed as you can. Your focus area over the next week *should* be the places where you did poorly in the previous exam. What's the point in learning something you are already good at, as compelling as it might be?

So by constantly testing yourself in a simulated environment and meticulously going over the results to find your weaknesses, you *will* see an improvement. Eventually, as the test day nears, you will find yourself feeling more and more jittery. The remedy here is to talk to yourself.

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When you look at yourself in the mirror in the morning, speak confidently about your capabilities.

*You can do this.*

---

You've come far and put in an incredible amount of effort. If you have been following most (or all) of our suggestions so far, nothing can stop you from seeing that dream score pop up on your screen soon.



## SECOND TIME'S A CHARM

As you and your peers begin to prepare and write these tests, it is easy to be bogged into a mindset where you constantly compare yourself with others. *She got 335 on her practice test, why am I not able to?* However, she might not have had to stay up late every night to finish her final semester project. She might not be spending hours as the head of the rotary club. Be kind to yourself. No one else is wearing your shoes, except you.

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Your only competitor should be the past version of yourself.

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This isn't me preaching. I'm talking from past experience.



It was the 12th of February, 2016. I remember my heart beating fast, and loudly, inside my head, as I clicked the final button before my score popped in front of my screen. 321. 166. 155. 5. I stared at it for a few minutes before it finally sunk in. Somehow, I had managed to score 10 points lesser than the scores obtained in all the mock tests taken just days before. I walked in with a goal of 330, and a perfect quant score, but ended up quite far off from it. I was extremely disappointed with myself. I walked out to face my father whose face screamed with expectation in hearing the result. I muttered it under my breath and walked away. I remember spending that day in my bed, tossing and turning as I thought about the money I wasted. One thing was clear though, I *had* to take the test again.

I spent the next two months away from anything remotely related to GRE, since I needed some time away to focus on all the activities that I could not due to the exam. I figured I would begin my preparation over the summer again. I came to the University of Wisconsin-Madison in the month of May for my summer internship through the S.N.Bose Scholarship program. In addition to spending a blissful three months in a new country and working on a challenging project, I also pushed myself to slowly begin preparing by the month of July. It wasn't until mid-August that I took it up seriously again. Fast forward two months and I was clicking *submit* once again, with my heart

beating fast and loudly. I closed my eyes and whispered a silent prayer. I opened them to four numbers: 328, 170, 158, and 5. I was relieved. I still wished I could have done better, but it was a sizable improvement, so I knew it was time to call it a day.

Know that some things are *just out of your control*. It is excruciating to accept that, but you will feel a lot lighter when you do. You can certainly improve the probability to ace your exam with intense practice. However, there is always that tiny, yet real, possibility that you encounter new words, sit next to a noisy air conditioner, or just have a bad day.

It's okay. If you feel you can do better, try again.

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It is important to set goals for yourself.

However, it is more important to know when you've done enough and call it a day.

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Not because you realize you can't reach the goal, but because you decide that the effort required to reach there is not worth the destination.

I could have tried a third time, and maybe crossed 330. In exchange though, I had to spend another \$200 and possibly dozens of hours going over the material again. I hope you won't be in a situation where you need to make that call. However, if you have to, just know that if I can do it, so can you.

## STUDENT TESTIMONIALS

“ I made complete use of the official materials by ETS: from their books to sample questions to the mock tests.

*Aside from that, I used the Manhattan 5 lb book and two mobile apps —Quizlet and Magoosh—for building my vocabulary. Finally, I also read The New York Times and other fiction novels I liked.*

*The bulk of my preparation was during my third-year summer internship, where I prepared one section every morning, alternating between quant and verbal. I timed my sessions and tracked my accuracy. I spent more time on the questions I didn't get right, detecting patterns and improving one cluster at a time. I realized I was struggling with reading comprehension, so I practiced more of it from the Manhattan 5 lb book. For AWA, I only practiced the questions specified on the ETS website and timed myself every time I wrote an essay.*

*I simulated the exam environment and took six mock tests to ensure that my body was used to sitting down and thinking for 4 hours. Apart from the ones provided by ETS, I also took other free tests from the Princeton review, Kaplan, and Magoosh. ”*

*- Anirudh Swaminathan, University of California San Diego*

*“ If you want to take the TOEFL, it is very important to first get familiar with the TOEFL format. An excellent resource to familiarize yourself with the exam is Magoosh. The video lessons and practice tests helped me devise strategies particularly for the writing and speaking sections of the exam. Here, a person's performance greatly benefits from having a good idea of the exam structure and various expectations in addition to being generally good with the language.*

*Specifically, in the writing section, Magoosh helped me avoid wrong answer traps and the numerous practice tests honed my approach towards the tasks. I had ample time to complete the listening and reading sections. The reading section tests our comprehension skills and critical thinking. To do our best on test day, it's a good idea to familiarize ourselves with these types of questions so that we can decide more quickly what information to look at and how to interpret it. ”*

- Sidhaarth V, Virginia Tech

## CONCLUSION

Language is one of the least understood and most complex of human inventions. Without it, we wouldn't be able to experience joy, sorrow, anger, or gratitude. We wouldn't understand each other. Even if speech is a lossy form of communication, it's the best we have. And the standardized tests you write help you better acclimate yourself to the new environment. We spoke specifically about GRE and TOEFL in this chapter, both administered by the non-profit ETS.

Before beginning your preparation, it's important to know where you stand. Take a diagnostic test first. Use the various tables from the chapter, and more you can find online, to understand where you stand and set a goal for yourself. You have to begin with the end in mind. Once you do that, collect all the resources you need over the next few weeks or months to prepare. Don't just stop with official text books. Take advantage of the free mobile apps out there that have pre-built materials.

We didn't prescribe a day-by-day plan for you here because no two people are built the same. Rather, we want you to follow some best practices that will set you apart. First, practice every single day, even if it's only for 20 minutes.

Science has proven time and again that this is the key to mastery. Use mnemonic techniques to remember abstract facts and concepts. Correlate words with images. Combine similar sounding words together. Read scientific journals. Find ways to retain what you read using the proven technique of spaced repetition.

Most importantly, keep testing yourself. You can't improve something you can't measure. Take inspiration from Aamir Khan and meticulously pour over your test results to find your Achilles' heel. Spend the following week improving in that area. You will greatly increase the probability of getting your dream score with these best practices. However, even the best of the best cannot escape the tiny possibility of messing up. It's okay. I know it feels soul-crushing, but you have the option to take it a second or third time. Just balance that with the time and money you have at your disposal.



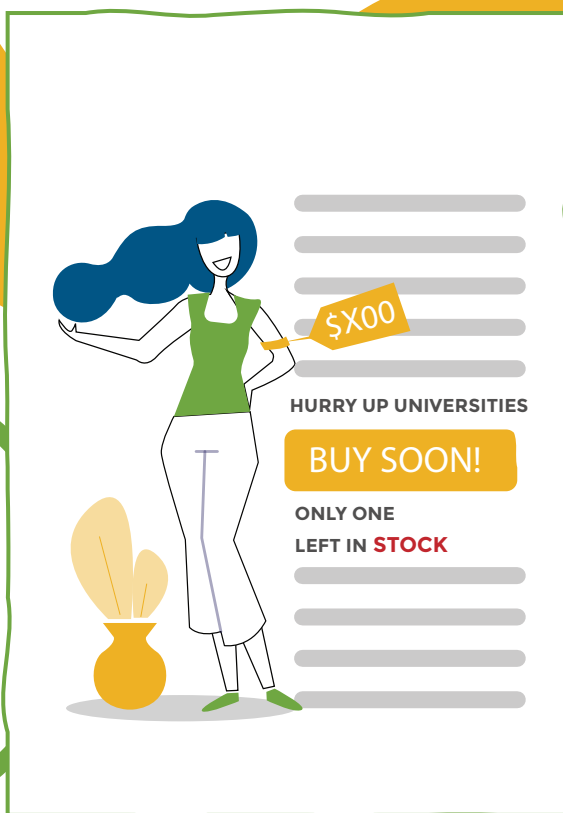
## A LITTLE REFLECTION

- ▶ Did you take a mock test?
- ▶ What measures are you taking to improve your sleep?
- ▶ Which memory technique seems most helpful to you?
- ▶ How can you make preparation for the exam more fun?

# Chapter 06

## CRAFTING YOUR RESUMÉ

Time to sell yourself  
on a piece of paper





A resume needs to be a living breathing document of who you are, what you've done, and what you hope to do. We know, that's a lot of pressure. That is why, in this chapter, we will be guiding you through the process of constructing a resume step-by-step.



Ah, the mighty tale of a resume—which means *summary* in French—goes back more than 500 years to 1482 when Leonardo Da Vinci wrote the first professional resume<sup>[1]</sup>. Of course, back then it was a mere description of what he did in the years 1481-82. There was a long period of dormancy for the next 450 years, and then the concept got picked up again.

By the 1950s, resumes became mandatory and included information on height, weight, marital status, religion, and even the number of kids one had<sup>[2]</sup>. It was a balance between a person's personal and professional history.



Fortunately, in 1965, the **Equal Employee Opportunity Commission (EEOC)** was established in the U.S. to prevent employers from discriminating against candidates based on their race, color, religion, sex, nation of origin, age, disability, and genetic information (including family medical history)<sup>[3]</sup>.



In short, it was to prevent companies from discriminating against you based on anything but your skill and past experiences.

At first, resumes were written on scraps of paper over lunch as a form of introduction. However, with time, owing to the introduction of word processors and typewriters, they began adopting a more slick and standard format. The arrival of fax machines in the late 80s dramatically changed the way resumes were sent. What took days to be sent by post could now be sent in minutes<sup>[4]</sup>. Then the internet and email came along to make this even easier. There was a brief period when some people thought that resumes would go out of style, but that could not be farther from the truth.

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Resumes might have changed in form from a lunch-time hobby to a highly standard document, but their relevance has stayed the same, if not more pronounced with time.

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A resume, today, is seen as a marketing tool where *you* are the product you're selling. It needs to be attractive, structured, and well-tailored. It is more important to *exclude* things than to include them in a resume, since it cannot span more than one page or look like a condensed ancient Indian scripture<sup>[5]</sup>.

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A resume is meant to be a *summary* of your education, work experience, and skills, and not the entire gist of it.

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And according to an eye-tracking survey by Ladders Inc.<sup>[6]</sup>, you only get 7 seconds to impress someone who reads it. So, how do you want to leverage that?



We highly recommend you do this exercise with us as you're reading this section.

First, there are two formats to choose from: the *chronological resume* vs the *functional resume*<sup>[7]</sup>. The **chronological resume**, as the name states, lists your past experiences starting from the most recent one. This is the format that is used by most candidates and preferred by most universities and companies. The **functional resume** highlights your skills and accomplishments, and is used by people who want to switch career fields. We advise you pick the former.

Assuming you go ahead with the recommended chronological resume, you can choose either a *one-column* or a *two-column* format<sup>[8]</sup>. We've provided structural samples of both to show the differences.

ONE-COLUMN RESUME FORMAT

**FULL NAME**  
Contact | Address | Profile

**Education**  

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**Experience**  

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**Projects**  

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**Skills**  

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**Volunteering/Awards**  

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TWO-COLUMN RESUME FORMAT

FULL NAME

Contact

Address

Profile

Education

Skills

Awards

Experience

Projects

Both the formats have their pros and cons. A **one-column resume** is more ATS-friendly (which we'll get to soon), suffers less distortion when converted into a PDF, and is considered the more acceptable format. However, it is not optimized for space, contains long sentences, and is not appealing to the eye. The **two-column resume** is newer and more reading-friendly. It lets you separate the less space-consuming sections such as *Education* and *Skills* from the more verbose *Experience* sections. However, it is less likely to be ATS compatible.



Of course, ATS refers to **Applicant Tracking System**. It is a tool used by companies, and more specifically recruiters, to manage the thousands of resumes that come into their pipeline, by parsing the resume's content for relevant keywords followed by sorting and ranking them into different categories<sup>[9]</sup>.

If you were applying for a data science role that specifically states that you need a background in Python, R, and Machine Learning, it's pretty obvious that the recruiter would only want to look at the resumes that had them. However, instead of having to skim through all of them manually, they let the software do its magic, which then provides them with a ranking of applicants (based on a plethora of indicators).

## 📖 ATS: A BRIEF HISTORY

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ATS is a quintessential example of the phrase  
*necessity is the mother of invention.*

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As mentioned before, the advent of personal computers, word processors, fax machines, and the internet over the decades made it exponentially easier for job seekers to create and send resumes. Not surprisingly, as their task became simpler, the employers' task in choosing a candidate for the job became harder.

Until the 1990s, recruiting happened primarily through classified advertisements in newspapers, but this changed dramatically as we entered the 2000s. An early version of the ATS began to take shape in a website based out of Canada<sup>[10]</sup>. Before we could reap the benefits of the internet though, there was the infamous dot com bubble collapse<sup>[11]</sup>. Within a few more years, there was the housing collapse<sup>[12]</sup>. All this meant the number of unemployed around the world skyrocketed in a short amount of time.

So what did they do to find jobs?

They flocked to job boards such as Monster and CareerPath which were already seeing steady growth.



This surge of growth left the job boards blindsided, paving the way to an accelerated adoption of the ATS software, which is **now used by over 95% of the Fortune 500 companies**<sup>[13]</sup>.

And somewhere along all this, the need to mention your race, height, weight, and more in your resume lost its significance. Fortunately.

We tell you all this so you know that the ATS is here to stay.

## ■ THE TWO-COLUMN RESUME

Let's begin constructing a two-column resume from scratch. If you choose to go for a one-column resume, you can still use all the best practices provided below since the difference between the two is more structural than

functional. We're going to pick a two-column resume format created by Debarghya Das<sup>[14]</sup> and taken from Overleaf, a website that lets you use ready-made templates and customize them in LaTeX (pronounced lay-tech).



**LaTeX**<sup>[15]</sup> is a document preparation system that is generally used for technical or scientific documentation writing. Unlike a word processor, it lets you focus more on the content of a document and less on its appearance, which is taken care of by it by assigning default values.

You can either pick the template we chose, or pick something else to your liking, and follow along. The following are the five major sections of the resume:

- ▶ Contact
- ▶ Education
- ▶ Work experience
- ▶ Skills
- ▶ Extracurriculars/Volunteering

Are you ready with a fresh template opened up in front of you? Let's begin!

## CONTACT

In my junior year, I used to think contact details meant I needed to include my name, date of birth, sex, full address, father's name, mother's name, and *more*. These were the days when I was still under the presumption that a resume spans four pages.

I've grown up a lot since.



Contact details only mean **five things**: your full name, professional email address (no more *poojavictory* or *iamcoolguy*), phone number (with the appropriate country and area code), short address, and a link to your LinkedIn profile.

If your LinkedIn profile link is too long, first customize it by navigating to your profile and clicking the *Edit public profile & URL button* on the top right corner<sup>[16]</sup>. Since two people cannot have the same public URL, this is a first come first serve feature. If you are not able to create something short, use a software that will help you shorten and customize URLs<sup>[17]</sup>. We recommend this because sometimes the recruiter might *print* out your resume as opposed to viewing it digitally.

After you're done, it should look something like the following:

Neel Sharma

neel@gmail.com | +91 99999 88888 | No. 123, Nice Apartments, Good City, TN 600001  
neelsharma.com | linkedin.com/in/neelshaarma

Although LinkedIn has become the Facebook of professional networking, you can go above and beyond by adding profiles from other reputed websites such as GitHub, Research Gate, or link your personal website which can act as a hub for all of the other sites. Tools like Squarespace and Wix have made website creation downright simple. If you plan to limit it to just your LinkedIn profile, ensure that it is up-to-date and complete (which we'll help you with in Chapter 17).

It might also be time to clean up your social media in general, seeing how the U.S. has made it a mandate to screen all applicants based on their online history<sup>[18]</sup>.





## EDUCATION

We've noticed that people outside India tend to have a narrow view of the universities in India. They have heard of the IITs... and that's pretty much it. However, don't be alarmed by this. The people who read your applications are used to viewing *and* admitting students from colleges belonging to all tiers, as visible from the undergraduate institutions represented at Harvard Business School<sup>[19]</sup>.

This section is to give the admissions committee an idea of not just where you come from, but also how well you've done academically. To do that, include the following fields:

- ▶ University name
- ▶ Degree and major (mention minor if any)
- ▶ Graduation month and year
- ▶ Location (follow *city, state* if it was in the U.S. or the country that you're applying to. For places outside, best to mention *city, country* since the admission committee wouldn't be familiar with your state)
- ▶ CGPA (optional: some students also mention a *major* GPA for subjects that are directly related to the major)
- ▶ Other distinctions (Top 5% in class / Top Ranker / other department specific awards)
- ▶ Relevant coursework (mention not all, but only the top 5-10 relevant coursework)

Below is an example of education and coursework:

EDUCATION

**NIT TRICHY**  
**B.TECH IN COMPUTER SCIENCE**  
May 2019 | Trichy, India  
Top 5% in Class  
Cum. GPA: 9.75/10.00

**D.A.V. GOPALAPURAM**  
**MAJOR IN COMPUTER SCIENCE**  
May 2015 | Chennai, India  
Top 1% in Class  
Cum. GPA: 10.00/10.00

COURSEWORK

**UNDERGRADUATE**  
Information Retrieval  
Operating Systems  
Artificial Intelligence  
Functional Programming  
Computer Graphics  
Computer Vision  
Unix Tools and Scripting  
Behavioral Economics  
Intro to Psychology  
Financial Management

As you can see, the same format can be followed for details of your high-school.

WORK EXPERIENCE

So far, you gave the reader an idea of where you studied and your tactfulness in creating email addresses (among other things). Now we come to the crux of the resume: your experience.

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*Experience should take up about 30-40% of your resume's real estate, for good reason. This is where you compress many months (or even years) into a few inches of paper.*

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For those of you who are applying right after your bachelor's, ensure to list all your internships *and* relevant academic projects. For those of you who have a few years of experience under your belt, use your best judgement in cherry picking the internships and projects you want to include. Relevance is key here.

Each experience should have the following fields:

- ▶ Company/university where you work
- ▶ Title
- ▶ Duration of internship/work
- ▶ Location (follow *city, state* if it was in the U.S. or the country that you're applying to. For places outside, best to mention *city, country* since the admission committee wouldn't be familiar with your state)
- ▶ 3-4 bullet points of the amazing work you did:
  - ▶ Include action verbs: *Spearheaded, Researched, Developed, Built, Streamlined, Improved, Lead, Served*, etc
  - ▶ Include numbers to show impact: *time, money, or other valuable resources saved*
  - ▶ Include any programming language or software you used and learnt
  - ▶ Finally, include the end-result of the internship if it resulted in a form of recognition: writing a paper, presenting at a conference, winning a hackathon, etc

Below is an example of a university experience:

**UNIVERSITY OF MICHIGAN | S.N.BOSE RESEARCH FELLOW**

May 2018 – Aug 2018 | Ann Arbor, MI

- Researched computer vision applications in low-cost unmanned aerial systems
- Developed Alta-02, an on-board target recognition system using Python and OpenCV
- Improved accuracy of recognition by 30% and submitted paper to IEEE

If you interned at a university (or company) for more than three months and have a lot to show, it's okay to extend beyond 3 bullet points. As a general rule of thumb though, we recommend you follow the *rule of three* whenever possible.

Below is an example of a company experience:

### **GOOGLE | ASSOCIATE PRODUCT MANAGER**

Jul 2019 – Present | Bangalore, India

- Captured customer needs, product scenarios, and user stories to improve upon the version 1 of Google Lens
- Collaborated with sales and marketing to launch Google Lens v2 with 50 million MAU (Monthly Active Users) and 70% retention
- Working to create a roadmap to launch a premium version of the product

Use the same principles mentioned before, but make sure to include keywords that are relevant to the degree you're applying for. If you're aiming to get into an Engineering Management program, having a product management background helps since many of the alumni have gone that route (including yours truly). Even otherwise, it shows them that you've worked with people to solve problems in a manufacturing or management setting.

For any papers you mention in this section (or under relevant projects), ensure to cite it at the end of the resume using the APA format<sup>[20]</sup> (below is the *apalike* format from LaTeX).

## PUBLICATIONS

[Saqi et al., 2019] Saqi, M., Khan, S., and Sharma, N. (2019). A study on detecting drones using deep convolutional neural networks. *IEEE AVSS*.

We trust you will fill the rest of this section with your experiences before moving on to the next.

## SKILLS

It's time to put to paper all those sleepless nights spent on Coursera learning to code and on studying to get the Agile certification.

---

In this section, include all the software, languages, and certifications you have earned over the past few years.

---

Once again, the skills you put down need to somehow relate to the degree you're applying to. While getting an Agile certification is helpful if you're going the program manager/project manager route, it doesn't seem too relevant for a master's degree in robotics. For programming languages (and skills in general), it's useful to mention the proficiency level along with the skill. It is near impossible to know multiple skills with the same level of proficiency (kudos to you if you do!). So use one of the following ways to distinguish between your skills:

- ▶ Proficient / Intermediate / Beginner
- ▶ Lines of code: > 5000 / > 1000 / < 1000
- ▶ Programming Languages / Software / Certifications (if you have skills in all three areas)

Below is an example:

## SKILLS

### PROGRAMMING

Proficient:

Java • Shell • Python • Javascript  
OCaml • Matlab

Novice:

C • C++ • CSS • PHP • Assembly

Software:

Tableau • GAMS • Jira

Do not fret if you don't have enough skills to mention. For non-coders, it's worth mentioning proficiency in languages (German, French, etc), soft-skills (Project Management, Agile Methodology, Scrum Certification, etc), and other interests (non-fiction writer, district level chess player, touch typing 80

wpm, etc). These skills are in no way trivial or irrelevant. In fact, I still have *non-fiction writer* and *badminton player* on my resume.

Maybe it's time to remove the latter.

So, dig deep into all the activities you did over the past 4+ years, and we can assure you that things will begin surfacing.

## EXTRACURRICULARS

Ah, finally we arrive at the fun part! This is where you get to include all the clubs, organizations, and festivals you were a part of. This is an important section of the resume. Why?

---

Extracurriculars signify that you actively took time out of an already busy schedule to contribute towards societal good.

---

Even if you were part of half a dozen communities, limit this section to a maximum of three experiences. In terms of things to include, this follows a very similar approach as your *Experience* section.

## EXTRA-CURRICULARS

### **3D AEROMODELLING CLUB | VICE PRESIDENT**

Jul 2017 - Jul 2019 | Trichy, India

- Led 20 members to work on 6 projects in a two-year span.
- Participated in 5 contests and bagged 1st place at IIT Mumbai's tech-fest twice.
- Organized a workshop every semester to a total of 500 students.

It's still advisable to use action verbs, mention numbers, and any competitions that you were a part of, or events that you organized for the wider community.

One section that we didn't explicitly mention above is the *Awards*. This is optional based on whether or not you've received them. For those who have bagged awards academically and/or otherwise, ensure to include a maximum

of five either on the right or left (depending on the space left over and assuming you're using a two-column format).

## AWARDS

|      |                     |                                         |
|------|---------------------|-----------------------------------------|
| 2019 | National            | S.N.Bose Scholarship                    |
| 2018 | 1 <sup>st</sup> /50 | Microsoft Coding Competition, Bangalore |
| 2018 | National            | Cargill Global Scholarship              |
| 2017 | Dept. Topper        | Certificate of Merit                    |

More often than not, the admissions committee wouldn't have heard of the country specific or state specific awards. So ensure to include the *integrity* of your award by mentioning the number of total participants or the level of locality of the award (national vs international).

With that, we're done with building the resume. Now, there's one final task before you can call this complete: making it ATS friendly.

### ATS BEST PRACTICES

Given how pervasive the ATS has become, it's highly recommended that you follow the do's and don'ts laid out below<sup>[21]</sup>:

- ▶ **Do** have long-form *and* acronym versions of keywords (e.g. Master of Science (MS) or Machine Learning (ML)) for maximum searchability
- ▶ **Do** use traditional resume fonts such as Helvetica, Arial, or Georgia
- ▶ **Do** use standard resume section headings (e.g. Work Experience, Education, Leadership Experience, etc)
- ▶ **Don't** use headers or footers as the information might get lost or cause a parsing error
- ▶ **Don't** use tables or columns as they often cause a parsing error
- ▶ **Don't** save your resume in formats other than .docx or .pdf

Most importantly, when you begin applying for a job or internship, plug in keywords relevant to the role so the software can pick up on it<sup>[22]</sup>.

---

ATS might have made your job harder by making you more mindful of the content. However, you can use this knowledge to be smarter and reverse engineer it.

---

## LET SOFTWARE DO THE WORK

Now, if you're wondering, *is there not a tool that does part of the work for me?*

The answer is a resounding yes!

Although we recommend crafting the resume yourself to get experience with LaTeX, you *can* use a tool that will simply take in the input and spit out an ATS-friendly, good-looking resume. One such tool is **ResumePuppy**<sup>[23]</sup>. It was founded by Saiman Shetty<sup>[24]</sup>, an *Einstein Visa* recipient and a veteran product manager from Tesla and Lyft, and Anish Hegde<sup>[25]</sup>, another product expert from Yahoo and Signeasy. ResumePuppy is similar to Overleaf in its functionality, but has a more user friendly interface.

Instead of letting you edit a LaTeX template, it lets you input content into pre-set fields under various sections of a resume. As of now, there is only one standard ATS-friendly template you can use for building your resume, but they are growing rapidly and have plans to add more features soon.



Glad you asked! We highly recommend following the design principles stated below:

- ▶ Do not go below font size 10.5. Ensure that your name is bigger than your headings than your paragraphs (ideally, follow the format 24 -



12.5 - 10.5 and bolden your headings).

- ▶ Use one of the more well-known fonts such as Helvetica, Ariel, or Georgia (*sans serif* fonts are more suited for a digital resume, whereas *serif* fonts like Times New Roman are better for paper resumes).
- ▶ Add strategic lines to partition your Resume well. It's recommended to add one below your name/contact details, one between various sections, and one to split the two columns (for a two-column resume).
- ▶ Strictly adhere to margins to ensure it looks neat. The recommended size is between 0.5-1 inches.
- ▶ Stay away from using colors if you can. Sometimes, things should remain black and white.



We don't particularly recommend adding a summary at the top as it can seem redundant. However, if you have a catchy two-liner that you're itching to include, we won't stop you.

Hopefully that gives you enough guidance to craft your resume. If you want to look at the complete resume that we were building in this chapter, head over to the Resources folder and go to the *Sample Resumes* sub-folder. Along with the two-column resume, there are other formats available.

You can also read more comprehensive articles on this topic<sup>[26][27]</sup> if you are looking for more inspiration. Now, put all this into practice and build your one page marketing tool.



## STUDENT TESTIMONIALS

“ *A resume is the first document that showcases your designing and organizing abilities. I created my resume in photoshop. I believe using non-traditional software like photoshop to create a resume showcases uniqueness in thought process and can be useful especially if you're looking to work in the domain of design.*

*I found many pros to using photoshop: a) you can create a color palette that brings out the kind of person you are (for example, blue equates to calmness), b) you can create guidelines and highlight the content you want on the page, c) you can create layers such that edits can be made to parts of the resume without impacting the rest of the content. Overall, there are many commands that can be useful in showcasing your experiences and skills.* ”

- Vishal Kothari, The University of Texas at Arlington

“ *I read a few sample resumes oriented towards graduate studies online. I stuck to using only two bullet points under each of my experiences, mentioned the courses that seemed directly relevant to the program, and kept the length to a single page. I also focused on the sentence structures for each bullet point so that every word counted.*

*What really helped was sitting with a friend of mine who was also applying for his master's degree and editing our resumes together. Having more than one person review it goes a long way.* ”

- Om Vaghasia, Columbia University



## CONCLUSION

Resumes have certainly had a long history. Beginning with Leonardo Da Vinci, they have gone through various stages: a lunch-time hobby on a scrap of paper, a typewritten document with unnecessary personal information, and now a highly customizable marketing tool. It is one of the first things that is considered by the admissions committee and contains all your details put forth in a lucid manner. In this chapter, we took you through the process of creating one from scratch.

First, choose between the one-column and two-column format. One-column is more ATS friendly and two-column is more reading friendly. The *Contact* section should have a clean email address, LinkedIn profile link, and preferably a personal website. The *Education* section should portray your academic caliber and relevant coursework. The *Experience* section, which takes around 30-40% of the space, should condense your internships and projects. *Skills* is best used to talk about your knowledge of various software, programming languages, and unique skills (are you a tennis state champion? Be sure to add that!).

Coming to the more fun sections, *Extracurriculars* is for you to show your involvement in organizations and societies. This section signifies your ability to be a team player and a valuable social member. Finally, there is the optional *Awards* section where it would be a good idea to include the number of participants and the level of locality of the award.

Once you're done creating your resume, use the ATS best practice to ensure you outsmart the software and the design best practices to make it *look* good. If you don't feel like creating your resume from scratch, use a website like Overleaf, and customize one of their preset templates. It's also a good way for you to learn LaTeX. Now go ahead and create an eye-catching one-page marketing tool.



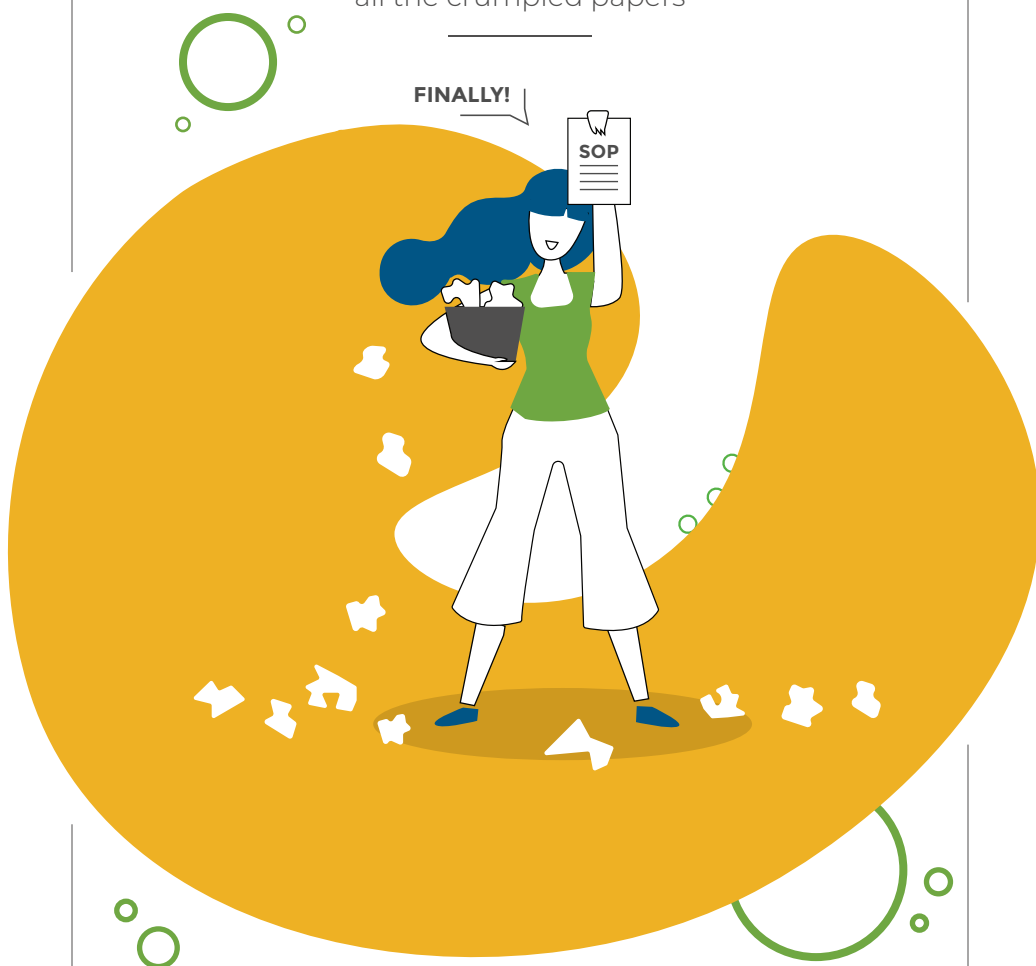
## A LITTLE REFLECTION

- ▶ Which template did you go with? What made you choose that?
- ▶ Which was the hardest section to write in this Resume? Why so?
- ▶ If you only had three lines to summarize your career objective, what would those be?
- ▶ Are you happy with the final product?

# Chapter 07

## WRITING YOUR STATEMENT OF PURPOSE

Time to make space for  
all the crumpled papers



Peter Wason<sup>[1]</sup>, a renowned cognitive psychologist, conducted an experiment in the 1960s, now popularly known as the *Wason Rule Discovery Test*. Let's briefly go through it.



At the beginning of the experiment, the participants were told that the experimenter had a *rule* in mind which applied to number triplets (for example, the rule could be *prime numbers*, in which case an example triplet is 3-11-17, or 79-139-191). The experimenter gave the example **2-4-6** as a triplet that followed this rule. The participants then had to correctly guess what the rule was by proposing their *own* triplets and getting feedback on whether or not those followed the rule. There was no limit on the number of triplets the participants could propose to get feedback on.

Take a moment and think about what triplets you would have proposed if you were a participant.

4-6-8? 1-3-5? 50-100-200?

If you thought of any of the above triplets, then good news! They *all* follow the rule. Yes, all of them. Now, what could the rule be?

---

Pause for a moment and formulate a possible rule in your mind before looking at the answer below.

---

The rule that the experimenter had in mind was the following: any triplet with an *ascending* sequence. In the experiment<sup>[2]</sup>, *“Six out of 29 subjects reached the correct conclusion without previous incorrect ones, 13 reached one incorrect conclusion, nine reached two or more incorrect conclusions, and one reached no conclusion. The results showed that those subjects, who reached two or more*

*incorrect conclusions, were unable, or unwilling to test their hypotheses.”* In a famous video simulating the experiment, you can see participants trying to continuously prove a hypothesis they had formed initially, even when the experimenter kept giving feedback that disproved it<sup>[3]</sup>.



If you had also proposed an incorrect hypothesis, there's a good chance you might have been a victim of **confirmation bias**<sup>[4]</sup>, our tendency to strive to *prove* our hypotheses, instead of *disproving* them.

To test the hypothesis, I played this experiment with a few of my friends and they *all* continued to prove their hypothesis even when I told them it was not right. Before reading any further, why don't you test this with someone who is next to you right now? Seeing it in action will help you grasp this idea better.



## COGNITIVE BIASES AND YOU

Confirmation bias is one of the cognitive biases.

---

Cognitive biases are unavoidable blind spots that  
lead you to quick, but faulty, decisions.

---

In the millions of years that our brain developed to become the powerful machine it is today, we fell prey to a lot of cognitive biases that helped us survive a particular period of time. The negativity bias, for example, helped our ancestors be vigilant to the dangers they faced during the hunter-gatherer era<sup>[5]</sup>. Although some of them are not needed anymore, they still persist and are hard to escape.



Wikipedia lists over **175 biases**<sup>[6]</sup> that plague us, ranging from **confirmation bias** to lesser known ones such as **hyperbolic discounting effect**<sup>[7]</sup>, a tendency to have stronger preference for immediate payoffs over future payoffs.

While we can get better at noticing these biases as we experience them, there is no escape.

---

Not for us, you, or the admissions committee.

---

While going through hundreds of applications, it is highly likely for the committee to experience a few biases<sup>[8]</sup>.

One example is **conservatism bias**<sup>[9]</sup>, also known as belief revision bias. It states that when we are presented with new information on a topic we're already familiar with, we tend to associate lesser weight to this new information compared to the original information. Generally, admissions committees tend to screen applicants first based on quantitative data such as CGPA and GRE scores. By the time the committee reaches the statement of purpose, their thinking is biased by the grades of the applicant.

However, biases are not always bad.

The same committee that suffers from conservatism bias, also suffers from **salience bias**<sup>[10]</sup>, a tendency to focus more on things that are emotionally striking. Or the **bizarreness effect**<sup>[11]</sup>, a tendency to remember bizarre events more than common occurrences. You could use that to your leverage and include an interesting and vivid story from your past that is sure to be remembered. Whether good or bad, we mention these so you understand that it is not a straightforward, objective process.



---

Understanding others' cognitive biases is useful;  
However, it is critical to know that it's *not* under your control.

---

What *is* under your control is writing a stellar essay that conveys your motivation to study abroad.

As mentioned in the prologue, you spend the greater part of your childhood swimming in a metaphorical river, constrained by the rules set in place by the government, society, and your parents. You get some breathing room to dabble in your interests when you enter college. Now, as you enter graduate school, you will have even more space to craft the path of your career and contribute to the broader community.

---

With more space, comes more uncertainties.

---

The committee needs to know that you have a focused purpose that will shield you through all the uncertainties. The statement of purpose is your chance to convey that purpose. **It is a statement of your purpose.**



We will be honest: we don't know. We approached Ross Gortner, Associate Director of Engineering Management, at Dartmouth College<sup>[12]</sup>. This is what he had to say:

“ *In the statement of purpose, I'm looking for the answers to two basic questions: who is this person and what is their*

*story. The essay should talk about where you want to go from where you are presently and how this particular program will act as a bridge for you.*

*Another important factor that I look at is whether you talk specifically about the university's capabilities and whether you have done your research to understand why you are applying to this program. I expect an applicant to provide a customized essay over a generalized one for the universities they apply to.*

*I first scan through the SOPs and check if most of the aspects are covered, and then spend more time on the selected ones. I read through all of them but would give more importance to the ones that are concisely written after distilling one's thoughts. Overall, I want to perceive how interested the student is in this program. ”*

In general, there is a lot of content on the web around this topic<sup>[13]</sup>. Some ask you to include interesting anecdotes while others suggest using this space to offer explanations on another part of your application (such as a low CGPA). We distilled all the information out there to present the *five* questions we feel you definitely need to answer in this essay. To make it more actionable, we have given examples from well-written essays at the end of each question.

Before we jump into all that good stuff, here's a mantra to keep telling yourself as you write this essay: *the statement of purpose is a place to talk about topics that are not evident from other parts of the application.*



## WHY THIS MAJOR AND UNIVERSITY?

Answering this question takes a non-trivial amount of effort.



Here are **two things to avoid** while answering this question: First, don't assume it is obvious to the admissions committee that you are pursuing a graduate degree in computer science because your undergraduate degree was in computer science. Second, don't search for the most recently published paper on the department's website and include that as the reason you wish to pick the university.

Making the above errors indicate that you are lethargic and put little thought into this.

“ You should not try to answer this question alone. You should start off by collecting research guides (or brochures or summaries) from the different departments where you will apply. You'll look through these things and you'll find summaries of ongoing research in the different areas that [that school] offers. You'll find a few projects (and possible faculty advisors) that interest you, and you will ask yourself this question: “If I worked in this [area], and if I worked on chunks of these projects, what would I try to do on my own?” The answer to this question should form about a third of your Personal Statement. ”

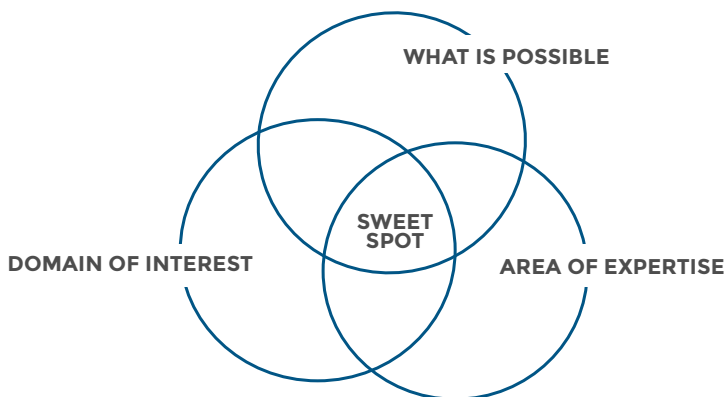
- Professor, Georgia Institute of Technology<sup>[14]</sup>

The admissions committee generally uses the statement of purpose for a few reasons:

- ▶ To weed out anomalies, such as students who claim they're pursuing graduate studies because their parents asked them to or students who have extremely poor writing skills (which we'll talk about soon)

- ▶ To gauge the interest of the applicant *and*
- ▶ To potentially match the student with a faculty from the department.

While it's understandable if you don't end up pursuing exactly what you stated in your essay, there needs to be a strong correlation or reason for you to have digressed. For those reasons, it is highly recommended that you do your due diligence in understanding the boundaries of what research is *possible*, what interests you, and what you have experience with from your undergraduate degree before answering this question (or choosing the major and university).



*[paraphrased] Throughout my undergraduate studies, I've been fascinated by solving problems that are an amalgamation of business and engineering principles. I've focused my coursework on two key pillars of the program—operations research and information systems. Within operations research, I have a strong foundation in probability and statistics, optimization and stochastic modelling. I've not only performed well in all classes, but also applied the concepts learned in real world situations. For example, I led a small team of two students to determine the outcomes of possible breast cancer screening policies (e.g. annual,*

*biannual, every three-year mammography). We built a decision tree (with 3 health states and 3 different screening policies over a 10-year period). Based on analysis of the tree, the optimal screening policy was determined. [...] My undergraduate education and abundant internship experiences have shown me I have the strong quantitative and qualitative skills necessary to thrive in all the core courses and electives in the IEOR department and the business school at Columbia. I believe these factors would enable me to excel in Columbia's Management Science and Engineering (MS&E) program.*

*- Graduate Student at Columbia University*

## WHAT DO YOU WANT TO SPEND THE TWO (OR FIVE) YEARS ON?

Graduate school is not easy, to put it mildly. You are putting yourself through financial debt, cultural transformation, grueling hours of schoolwork, and possibly developing an **imposter syndrome**<sup>[15]</sup>. All in the hopes of getting a job that will pay off for all your hard work.



What is it that motivates you to go through this?

What questions are you trying to answer?

What ideas have constantly knocked on your mind imploring you to explore further?

Note that this question is *extremely* important if you're applying for a doctorate degree, which stretches on for five years or more. Nevertheless, even for a master's degree, you need to have an idea of the research that you want to pursue.

“ It is best for both the department and the student if there is some match between the student’s interests and the department’s research projects. It is a good idea to do some research on each graduate school’s research projects and tailor your personal statement accordingly. Statements that praise our department on its excellence in a topic where no current research is going on raise a red flag to the committee and these applicants are generally rejected. ”

- Professor, Georgia Institute of Technology<sup>[14]</sup>

This ties into what we mentioned for the previous question. Unless they see a fit between your interests and what *they* can offer, they would not be motivated to pick you. This question is also a place for you to go back and write down all the questions that have grabbed your attention while you were running a model simulation during your internships or sitting through a powerful presentation at a conference.

Elucidate how you plan on getting these questions answered during your graduate school either by working under a professor’s wing or by leveraging the industry partnership program at the university (or both).

*One of these days, while I was trying to implement a self organizing map, I wondered if a hardware implementation of the neuron exists. Isn't the massively parallel architecture of the brain the reason behind its ability to process petabytes of data daily and swiftly? Google eventually gave me something: a silicon brain project, a chip that mimics the neuron; but I didn't get as many search hits as I would've really liked. [...] The brain's processing needs to be simulated using a new architecture that is vastly parallel like the neural mesh of the brain itself. Has it*

*already been simulated like this? I need more knowledge on the subject to answer such questions. This thought is only related to a subset of the vast subject that is Artificial Intelligence. There is so much still to do in Artificial Intelligence that Russell and Norvig in their book “Artificial Intelligence: A modern approach” state that “several full-time Einsteins” can work on it! I want to be part of the academic community diving into Artificial Intelligence.*

*- Doctorate Student in Computational Neuroscience*

This stellar essay, along with many more, can be found in the Resources drive.

## ■ DO YOU HAVE THE REQUIRED EXPERIENCE?

The nail in the coffin for the two questions above is your response to this one. Expressing your interest in a topic that is being worked on by the university would bear no fruit if you don't have *some* relevant experience already in the said topic. A best-selling author does not start out asking publishing houses to look at her manuscript without spending years conducting painful research and writing relentlessly.

You need to show tangible work you did, *along with* the results.

“ *We have admitted some students because of projects they talk about in the SOP, but we want to see results (publications, etc.) and what the faculty letter-writers have to say about it. The SOP itself is not driving this evaluation but may help to put what you have done into context for us. The SOP is your chance to tell us what you want to do (at this point) and why, and to put all the other information in the application into some sort of contextual or narrative*

*framework that helps us make sense of what you have been doing.* ”

- Professor Emeritus, CMU<sup>[13]</sup>

We understand that not everything you have worked on in the past might be relevant to your future; at least not directly. That's completely fine, as you can see from my own story. The admissions committee understands that students like to explore their interests and dabble during their undergraduate degree to find their passion(s), so to speak. While they're okay with a student not having multiple relevant experiences, they do want to see someone who has taken things to the finish line before.



Have you published a paper?

Did your team get to the final stage of a hackathon, maybe even win it?

Were you the founder of an organization or community that created an impact?

All of these carry an enormous weight, because it shows them that you have what it takes to finish what you start.

*The Discrete Mathematics course during my sophomore year introduced me to predicate Calculus and prepared me for a research internship in Logic at the [university] under [professor]. Under his tutelage, I developed an automated problem solver for the famous Einstein puzzle, which involved translating user input to meaningful predicates and extensively used resolution principles to arrive at the solution for the puzzle. Drawing*



*inspiration from my experience at [university], I took to developing an automated Boggle solver back at college. I drew on the ideas I picked up in my algorithm course to use a greedy approach involving recursion and backtracking to find words in sequences of adjacent letters in a grid. [...] During my final year, the elective course on Data Mining drew me to explore Recommender Systems. In my final year thesis, my work involved enhancing the traditional memory-based filtering technique by effectively using singular ratings to improve the accuracy of existing recommender systems. The proposal was prototyped using Python and received an award of S grade, the highest one allotted.*

*- Graduate Student at Stanford University*

## ❓ WHY DID YOU DO THE THINGS YOU DID?

This is a crucial question to answer, because this is not answered *anywhere* else in your application. While your grades and scores talk solely about outcomes, this question gives you an opportunity to *justify* them. This question can be used to explain anomalies in your application (such as a very low CGPA or test score) and/or walk them through your thought process during the moments you took an important decision in your career, such as choosing to work on a niche topic under a professor.

“ *Understanding the reasons that led to something, accepting it gracefully and striving hard to get better, are all the signs of maturity, and top programs hunt for mature people. For something as basic as failing an exam, a mature person will always realize where (s)he is at fault. More than the ‘situation’ itself, the admissions committee is interested in*

*the experience of it, how you overcame it and what you learnt from the entire experience. ”*

*- Overseas Education Specialist at MINDLER<sup>[16]</sup>*

If something changed the course of your career path or you faced a hardship that influenced your future goals, this is the place to address that. Sai and I changed our course of careers after undergraduation. We studied core engineering (mechanical and chemical respectively) but then switched to a degree in engineering management which led to a career in product management. We understand the difficulty in writing a cogent essay, hoping the admissions committee will see where you're coming from without having met you.

---

The best way to do that is to be honest  
in addressing your transformation.

---

*Growing up, I was very close to my grandfather. When I was about 12 years old, he suffered a brain hemorrhage resulting in retrograde amnesia. He couldn't remember his family members or his own name, but could perfectly identify mistakes in Ragas when my mother sang, as he had been an Indian classical musician for many years. I wanted to find out how this was possible. This was the first time I started reading about the human brain. And, from this stemmed my passion for neurobiology. [...] After graduating as valedictorian in both my high school and pre-university, I wanted to study life sciences. Being in India, where there is little interplay between life science and technology in undergraduate science courses, I felt that the best way to experience the synergy would be to study Biotechnology Engineering. I enrolled at the Department of*

*of Biotechnology at [university], which is one of the leading  
Biotechnology departments in India.*

*- Doctorate Student in Biochemistry*



## WHAT WILL YOUR FUTURE CONTRIBUTION TO SOCIETY BE?

We know you have grand dreams you wish to realize one day. Show the committee that studying at their institution is the right means to achieve them. This goes back to the point of having questions that you want answered through your graduate school experience. If you're hoping to become a biomedical engineer who wants to help paraplegics walk again, you need to find out the questions that your graduate school experience can answer for you: *can we use technique A to improve somatosensory reflexes by x%? What are the main causes of symptom B? What research has been conducted thus far at the university on topic C?* Once you lay out your thoughts on the topic, don't be shy in speaking in detail about your goals.

Each of us wants to leave this world better than we entered it. Why am I writing this book?

---

To bridge the gap between those who seek out quality  
education and those who can offer it.

---

To democratize valuable information so everyone who needs it has access to it.

To level the playing field irrespective of someone's economic background.

So, as you describe your future goal(s), go into specifics on *why* and *how* you wish to achieve them.

*[paraphrased] In five years, I will launch India's first virtual reality restaurant. In a food obsessed country like India, this unique eatery, via an application, will bring the menu alive by projecting a virtual 3-D representation of food choices and present customers with the look and texture of the food item before they place the order. There would also be a projection of a mini chef who prepares the dish on the table in front of clients, waiting to be served. My vision is to channelize the profits from my restaurant into finding an effective solution to India's food wastage problem. [...] India wastes 40% of the food it produces and yet, 135 million people go hungry every day. I encountered this disturbing statistic when I volunteered as a Community Representative for The Roti Bank Foundation of India, a non-profit that collects perfectly edible surplus food from houses and distributes it to the needy. By designing the distribution process around a temperature controlled casserole which gave community residents the flexibility to drop off their rotis on the way to school/work, I collect and supply 240 rotis and feed 150 people every day.*

*- Aniruddh Menon, Graduate Student at Dartmouth College*



Aniruddh was meticulous in adding a footer in his essay explaining what a *roti* meant. If you plan on including terms that are colloquial or regional which an international audience might be unfamiliar with, **please add a footer** or provide some context inline.

## 💡 FINALLY, BE YOURSELF

This is a lot harder to explain than any of the previous questions.

---

Identifying a disingenuous essay is like  
seeing through clear water.

---

Don't forget that those who read your essay have *years* of experience reading thousands of such documents. They know when they're listening to a student talk about a topic they have little knowledge on. They know if you're faking an illness to justify a bad outcome. We cannot stress the importance of sincerity while writing this essay.

Graduate school is a dream come true for thousands of students every year; but truly reaping the reward from the experience won't happen if you begin the journey with an inaccurate portrayal of yourself.



This is also a chance to think about how you can channel your quirks and personality through paper. If you were to read out the essay to someone in a conversation, how would you word it?

To finish this off and give an example, below is an excerpt from the final passage in one of the sample SOPs.

*There is only so much one can include in a statement of purpose. I hope you will take the chance of knowing me in person by accepting me to the institute. I want to be part of the Artificial Intelligence dream of developing intelligence as humans exhibit it. I am committed to contributing to the global committee to the best of my*

*ability. I am working at a consulting firm at the moment. The work is good, yes, but it isn't anywhere near challenging or thrilling as the smallest new piece of information that I come across on Artificial Intelligence. It's only a nudge I'm looking for to get me started. Please grant it to me.*

*- Doctorate Student in Computational Neuroscience*

## PRINCIPLES OF WRITING

We talked a lot about the questions you need to answer, but just as important is *how* you answer them. As you begin to write your essay now, keep the following two writing principles in mind.

### SHOW, DON'T TELL

There is a famous quote attributed to one of the greatest writers of fiction short-stories, Anton Chekhov<sup>[17][18]</sup>.

“ *Don't tell me that the moon is shining; show me the glint of light on the broken glass.* ”

We want you to read that quote once again. It has a powerful meaning.

Too often, students clutter their essay with bombastic adjectives: *hardworking, disciplined, driven, passionate, empathetic*. Rather than *telling* them that you are a hard worker, *show* them that you are a hard worker by talking about how you used to spend every weekend volunteering at the local food shelter.

### CLARITY OF THOUGHT

A core tenet of writing is *clarity of thought*.

“ *I'm always excited by the rare applicant who clearly has thought through a research area, and has some ideas and real thoughts about problems he/she wants to tackle. It's fine if the ideas are not likely to succeed, or if the thoughts are not realistic for current research. What matters is that the student showed their logical reasoning skills, and their passion for research at the same time.* ”

- Professor, University of Chicago<sup>[19]</sup>

William Zinsser, a renowned non-fiction writer and one of my inspirations, rightly said that **writing is thinking on paper with clarity**<sup>[20]</sup>.

---

As long as you can *think* clearly,  
you should be able to write clearly.

---

This ability to think with clarity is more rare than you would imagine, and requires a good amount of introspection and taking walks. Hence, even before you begin writing, remember to first think through your ideas clearly. Only then you should transfer them onto paper.

Apart from those two core principles, here are a few more do's and don'ts while writing your essay:

- ▶ **Do not** have typos or ungrammatical sentences. This has to be the basic level of editing that you do before submitting your essay. Take advantage of the many software applications that can do this for you<sup>[21]</sup>.
- ▶ **Do not** use excessive punctuation such as quotes (“”), en-dashes (“-”) , semicolons (;), and contractions such as “don’t” and “B.S.” Remember that they would also not know acronyms of universities in your country.

- ▶ **Do not** be ambiguous in your sentences. Use an active voice to speak about *specific* situations that *you* faced.
- ▶ **Do** use a formal and conversational tone. The tone you use should convey enthusiasm and interest, without coming across as sarcastic or witty (yes, please avoid all jokes).
- ▶ **Do** stick to the specified word limit. If no limit is mentioned, write 750 to 1000 words in a 12 point font with a 1-2 single space between the lines. **Remember, brevity is always better than verbosity.**
- ▶ **Do** know that simplicity is underrated. Although you might have stuffed your brain with words learned for your GRE exam, this essay is not a playfield to use them. Readers appreciate a simple and clear sentence, as opposed to one that requires them to open a dictionary.

Hopefully, that has given you enough ammunition to begin writing. Although we showed you excerpts from essays in this chapter, we want you to write your first draft *without* looking at more examples. Your first draft must be impulsive; let your subconscious mind take over and blurt out all the thoughts you have on paper so your mind is set free.



Daniel Kahneman<sup>[22]</sup>, a renowned psychologist and economist, proposed in his bestseller, *Thinking, Fast and Slow*, that we all have two modes of thinking: System 1 and System 2<sup>[23]</sup>.

**System 1** is the more impulsive, automatic, and involuntary part of your mind. It is what helps you jump off a curb when you see a speeding car or locate the source of a sudden noise. On the other hand, **System 2** is the more deliberate, slow, and voluntary part of your mind. You were able to write your final thesis and solve complex algebra thanks to System 2. It requires you to devote your attention and think deeply about a topic.



They both have their merits and demerits. We recommend writing your first draft using your System 1, and conducting subsequent edits with System 2.



Glad you asked! We recommend doing the following:

- ▶ First, review it yourself by going through some good samples
- ▶ Second, get it reviewed by alumni in your field of interest
- ▶ Finally, get it reviewed by alumni and friends who aren't necessarily in your field but have great command over the written word

## REVIEW IT YOURSELF

Writing a stellar essay requires reading dozens of stellar essays. You can start with the Resources folder where we've added a few samples. Beyond that, there are many publicly posted samples out there that will stimulate your thinking<sup>[24]</sup>.



When you find a sample that catches your attention, open it in a document format where you can begin adding **highlights** and **comments**. In fact, we would even recommend printing out these essays and doing it the old fashioned way, using a highlighter. Write down the parts you liked about the essay, and why you think you liked them. Was it the choice of words? Was it the depth that the candidate went into while describing a concept? Was it an interesting life experience? Write it down and go back to your essay to find ways to incorporate the same.

## REVIEW BY ALUMNI IN FIELD

This refers to your seniors and mentors who are currently in or were in the position you aspire to reach, working in your domain of interest.



Before you send out the emails to them, spend some time wording it carefully. The people you reach out to are probably in graduate school themselves, working 60 hours a week. And yours would also not be the only email request they receive.

So, take the time to do the first few reviews yourself (or with the help of a close friend) before reaching out. In your email, the following topics should be conveyed clearly: interest in studying abroad, relevant past experiences, and the request. Below is a sample template:

*Hi Neel,*

*How are you? I'm sure you must be drowning in classes and assignments. What is something you learnt recently? I would love to know. I recently came across your article on the day in the life of a graduate student, and devoured it! You probably know, but I'm applying for a Master's in Electrical Engineering myself now and couldn't have read it at a better time.*

*I knew I wanted to study abroad within the first ten days of my summer internship at University of Waterloo, Canada. The stereotypes that I un-learned and people I met will always have a lasting impact on me. But, choosing the universities to apply to and nailing down my specialization took more time than I thought. I'm sure you must have gone through something similar.*

*I spent a week writing the first draft of my SOP; writing for 30 minutes every day. I also spent the next two weeks editing it by reading through some amazing samples online. However, to truly make it insightful and strong, I need help from seniors like you that I look up to, who also specialize in a similar field.*

*I know you're busy, and really want to respect that. Let me know if any of the following options work for you:*

- a) Sending me your SOP so I can use that as a guide*
- b) Sharing some important guidelines in writing one or*
- c) (Most preferable!) Reviewing mine and adding your comments as feedback. If I'm being overly ambitious, it could even be all three :)*

*However, if you don't have time or don't feel comfortable sharing yours, please share any insights or advice! Thanks for reading till here, Neel. I can't wait to hear back from you.*

*Best regards,  
Siya*

As you reach out to people, it is important that you keep track of your emails. If someone does not respond back in ten days, it is absolutely okay to send them a gentle reminder.

---

A lack of response doesn't always mean a lack of interest.  
Sometimes, people are just busy.

---

Finally, when you share your essay with them, please do it via Google Docs or a similar collaborative tool so they can easily add comments to it. Reduce friction from their end as much as you can.

## REVIEW BY GOOD WRITERS

You can follow a similar process as before here, except the kind of input you receive from a good writer would be different from the kind of input you receive from a subject matter expert. You need an essay that conveys your purpose *and* portrays your written skill. When you reach out, mention that you specifically want them to critique the diction of your essay.



Finally, don't reach out to everyone you know at once. Assess the quality of feedback the other person can provide first. Are they an amazing writer with limited time? If yes, you should probably reach out only after you've reached version six or seven of your draft. You want **incremental input to improve**, not a storm of input at once. And even after you receive all their input, assess if it makes sense before incorporating it.

A lot of students want to know when an SOP can be called complete. We know you won't like this answer, but the truth is: *it will never be complete*. However, the best practice is to get it reviewed by three to four people and review it yourself half a dozen times. Keep it ready at least a week or two before your deadline. In the final week, simply revisit it every few days and make minor corrections.

We can't help you in deciding when you know it is complete, but we can tell that you will reach a stage where you wouldn't want to read a word of it anymore.



This is a great question. A great SOP is not just written well; it is also *presented* well. Similar to the tips that we had mentioned for editing a resume, we have a few tips for your essay as well.

- ▶ Use a clear, readable font such as Times New Roman or Helvetica.
- ▶ Stick to a font size of 12 with a 1.5 line spacing and a margin size of 1 inch on *all* four sides.
- ▶ Do *not* try to make it look eye-catching by adding colors or your picture. They care much more about the content than the visuals.
- ▶ Upload it as a PDF file so the formatting is maintained.
- ▶ Indent the first line of each paragraph by half an inch and *justify* your text.

## ■ TAKE A WALK

As a final piece of advice, take a walk.

Alone, and without your phone.

It can be around a basketball court or in that garden next to your university's main office. Cal Newport<sup>[25]</sup>, an associate professor of computer science and the author of many best sellers, says in a famous talk<sup>[26]</sup>,

“ The way to find your passion is to be so good at something that the people around you can’t ignore it. ”

And the way to be so good at something is through unadulterated practice and *deep work*, an ability to focus without distraction on a cognitively demanding task. That cannot be attained by sitting in a noisy cafeteria surrounded by people and distractions.

---

A quiet walk → clarity of thought → a great essay

---

So take a walk, every day if possible, for thirty minutes to an hour and observe your thoughts *without* judging them. You will be surprised at the kind of insights you generate about yourself and your environment. It is no surprise that the best ideas come to you when you least expect them<sup>[27]</sup>.



Graham Wallas<sup>[28]</sup>, a social psychologist and co-founder of the London School of Economics, broke down the creative process into four steps in his 1926 book *The Art of Thought*. The four steps are: **preparation**, **incubation**, **illumination**, and **verification**.

Most people tend to overlook stage two in this process, where they are supposed to *incubate* themselves somewhere *far away* from a problem so they can generate novel thoughts and be more efficient while they return to solve it. Your brain likes it when you let it wander on its own after putting in cognitive effort in the preparation stage.

So take a walk alone with your thoughts, and you just might figure out the opening sentence of your essay.



I performed the painful task of re-reading the different versions of my statement of purpose I had written more than three years ago. In one sense, it acted as a time-travel lens to magnify the level of specificity (or lack of thereof) I possessed when I was applying for my graduate program. My essay was all over the place.

It began with a childhood memory of how I was inspired to pursue science. The body of it battled between an overview of my research and the organizations I managed. The ending was lackluster with a generic mention of a professor's name and a recent paper of his from the university I was applying to. I ended up not following many of the qualities that make a great essay; many of which I'm asking you to follow now.

If I was reading my essay right now, and had to decide to select or reject 2017-me solely based on the essay, I would probably reject me.

That is why I want you to learn from my mistakes. I want to shine a light on the many *invaluable* lessons that someone can learn in hindsight, and hope you imbibe some of them right now.



## STUDENT TESTIMONIALS



*I found myself trying to write an essay amidst the stress of senior year coursework, thesis work, and placements. A friend of mine suggested I obtain a free profile review by a consultancy. I was a top student in my class and proactive when it came to extracurriculars. So when I saw that the*

*consultancy recommended universities that were all tier 3, I was shocked. I decided to take things into my own hands and began drafting my SOP.*

*I wrote the first draft without giving it too much thought. Then, I looked for SOP questionnaires online that provided guidance on questions to answer. Once it got to a good stage, I began removing unnecessary information, followed by getting feedback from my alumni and mentors. Finally, I began fine-tuning it to adhere to the word limit set by each university. I went through the editing process separately for each university. ”*

*- Nivedhithaa Santhakumar, Purdue University*

“ *Around mid-October, I created a rough mind map, trying to answer some basic questions around my academic interests and long-term goals. I thought hard about how I can contribute to a university’s research work and what I can take away from it. In hindsight, these were the main segments of my essay, but the journey wasn’t smooth. As soon as I began writing, I experienced the dreaded writer’s block. However, soon after, I wrote 2500 words in one sitting and ended up with a rather verbose essay.*

*In the end, what helped was putting myself in the shoes of the admissions committee and imagining having to read a hundred essays a day. That made me talk about only the most pertinent ideas and be parsimonious with the whitespace. Of course, this was followed by iterative alumni reviews that helped fine-tune the sentences and improve the*



*presentation of the content. In short, be original, and come up with a way to stand out from the crowd. ”*

*- Vishnu Chandrasekhar, Carnegie Mellon University*

## CONCLUSION

Humans will always be riddled with cognitive biases. Rather than trying to escape them, think about how you can use the knowledge to your advantage. The Statement of Purpose is one *part* of your application, not all of it. Don't overstate its importance. The person reading it wants you to show them how you plan on utilizing the time spent at their university as a bridge to go from where you are now, to where you want to be.

As you begin to think about writing the essay, first take a step back and try to answer a few questions: why are you choosing this university and major? How do you want to spend your time at graduate school? What is your long-term goal? Do you have the experience needed to provide value in return? Can you think and write clearly? These questions should be used as guiding principles, and ideally, your essay should answer all of them.

Getting your SOP reviewed is very critical, but don't begin sending emails to dozens of seniors without wording it carefully first. Be very selective in the people you choose, and try to reduce the friction from their end as much as possible by sending it in a collaborative document where they can add comments, and send helpful reminders if they don't respond after a week. The people you reach out to have been in your shoes already, so they understand the need.

You will never be sure that you have reached the end of your review process. So either stop editing it a week before the application deadline, or set a threshold of six to seven reviews before declaring it done. Finally, take a walk alone to indulge in your thoughts. You'll be pleasantly surprised at the things you begin to notice.



## A LITTLE REFLECTION

- ▶ When you went through some of the cognitive biases, did you notice any that you fell prey to recently?
- ▶ What do you want the person reading your statement of purpose to walk away thinking?
- ▶ If you were the senior being approached by five students, how would you want them to email you?
- ▶ What interesting thoughts did you have after taking a few walks?

# Chapter 08

## GETTING YOUR LETTERS OF RECOMMENDATION

Time to reconnect with your  
professors and mentors



When we think of our professors, we generally picture them inside a classroom with a clicker (or a piece of chalk) in hand, delineating a topic with ferocity.



Our mind falls prey to a few heuristics when it comes to decision-making, one of which is called the **representativeness heuristic**<sup>[1]</sup>. It was discovered by two behavioral economists and Nobel laureates, Daniel Kahneman<sup>[2]</sup>, who we referenced in Chapter 7, and Amos Tversky<sup>[3]</sup>, in the early 1970s.

You can think of heuristics as shortcuts that your brain uses to reduce cognitive overload and get to a decision quicker. However, sometimes, these shortcuts lead to faulty decisions and stereotypical thinking. Let's look at an example from their book, *Thinking, Fast and Slow*<sup>[4]</sup>, that we introduced in the previous chapter:

“ *An individual has been described by a neighbor as follows: “Steve is very shy and withdrawn, invariably helpful but with very little interest in people or in the world of reality. A meek and tidy soul, he has a need for order and structure, and a passion for detail.” Is Steve more likely to be a librarian or a farmer?* ”

What do you think?

Most people think Steve is more likely to be a librarian. However, the number of farmers greatly exceeds the number of librarians in the world. We don't take such statistics into account while making these observations.



When we make decisions based on representativeness of what we already know about someone or something, **we generally tend to overestimate the likelihood that an event related to that will occur**, even if it objectively would not.

In this scenario, since we have observed our professors to be inside a classroom during most of our interactions, we tend to be blind to the rest of the duties they attend to. A typical day for a professor involves teaching classes, preparing for the classes they teach, receiving over 50 emails and responding to about 40% of them<sup>[5]</sup>, writing academic paper(s), reviewing academic paper(s), managing administrative duties (which some<sup>[6]</sup> have shortened to RAM, i.e., Random Ass Meetings), and of course, if they manage to find the time amidst this chaos, *actually* perform research to advance humanity's collective knowledge.

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The next time you approach a professor to ask for a letter of recommendation, remember the above and make their job as easy as possible from your end.

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UNDERSTOOD! CAN YOU TALK ABOUT HOW  
TO CHOOSE THE **RIGHT PEOPLE** FIRST?

Great question. Most components in your application—statement of purpose, resume, extracurriculars—are a personal account of why *you* think you should study at the university you're applying to. The letter of recommendation, on the other hand, lets the admissions committee know

why someone *well-regarded* and *academically sound* thinks you should study at the university. It is not to be regarded as a mechanical task wherein you write up a generic draft which is then blindly signed by your professor and sent to the university.

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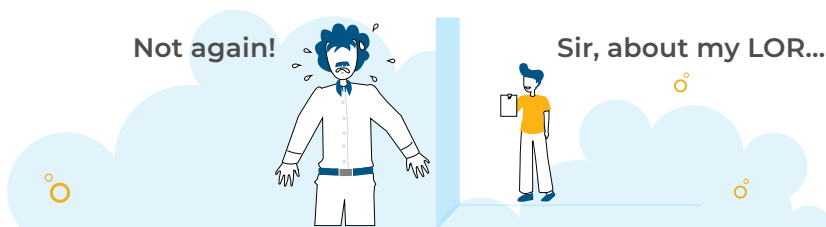
A recommendation letter is a pretty big deal.

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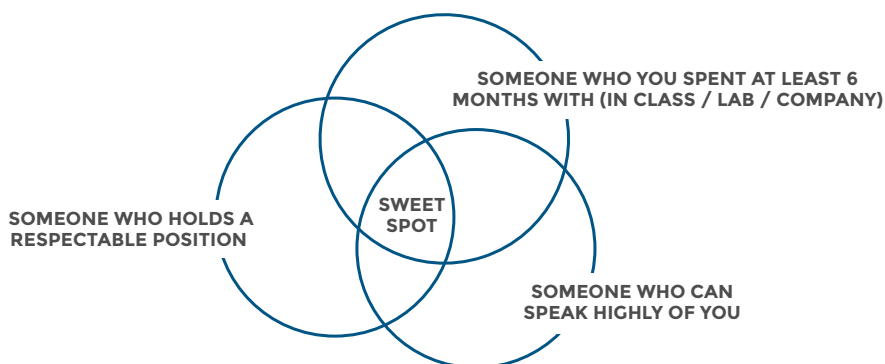
And the professors know this. A seasoned professor might have written dozens in their lifetime. However, that does not mean they *enjoy* writing it. I found a question on Quora asking if professors enjoy writing recommendations. Here is an excerpt from the response by Tim Hanson, a professor at the University of Southern California<sup>[7]</sup>.

“ *Honestly? No. It takes me at least a couple hours to write a good letter. This involves boiling everything a student has done down to two “knock ‘em dead” paragraphs. So I have to read their vita, teaching evaluations, discuss courses I’ve taught them, awards they’ve received, etc.*

*I often put writing such letters off because I dislike it so much, even for the best students. BTW, if I cannot write a student a good LoR I tell them that directly up front. That way they can ask someone else.* ”



So, it is up to you to primarily choose the right people. The right person is someone who sits in the intersection shown here:



This is *not* a trivial problem, so take your time to choose the right list of people. We recommend following the method laid out below:

### 1) CALCULATE NUMBER OF LETTERS NEEDED

Generally, a university would require either two or three letters of recommendation. In most cases, it is two. Assuming you plan on applying to eight universities, that comes to 16 to 20 recommendations. However, that does not mean you need to find 16 to 20 *recommenders*, since a professor would be willing to shell out more than one. From our experience, professors provide three on average, and maybe more depending on the strength of your relationship.



A back-of-the-napkin calculation says that you would need between **four to six recommenders** to apply to eight universities.

Now, let's stop assuming and start putting this data in the *Dream Tracker*.



Navigate to the sheet titled *LORs*, add your list of universities, and fill in the column that asks you for the number of recommendations needed for each.

## 2) CREATE LIST OF POTENTIAL RECOMMENDERS

As mentioned earlier, it *has* to be someone who you spent a significant period of time with. The six months mentioned is a good standard to keep in mind, but it can also be an employer with whom you interned for a period of three months.



Although we have been using the term *professor* as a catch-all for people who can recommend you, **it doesn't have to be someone within the realms of academia**. In fact, it would help if you can get it from someone who works at a company (a manager, or maybe a CEO?), so your profile looks well-rounded.

Since we decided you might need between four to six recommenders, be sure to have a list of at least six so that you have a buffer for people who might say no.

## 3) RE-CHECK THE LIST ONCE MORE

Ask yourself if you put down a name because they have closely observed your work or because they are the head of a department who has seen you thrive over the past four years. We *all* want to get a recommendation from the heads of departments and directors of companies.

However, would you rather someone write this:



“ *It is my pleasure to recommend Siya to your graduate program. Siya took my course on Psychology in her junior year. She is a strong student, works well with her peers, and is attentive inside the classroom. She scored an A in my course and consistently scored above average in her assignments. Apart from being a good student, she also is the head of design for the university’s magazine and spends her time volunteering at the local NGO on the weekends.* ”

Or have them write this:

“ *Siya caught my attention from the very first day with the thought-provoking questions she asked in my classes, when she took my course on Psychology. She displays maturity that goes well beyond her years and treats her peers with great respect, something that I witnessed when her team came for the office hours every other week. Apart from excelling inside the classroom, I’ve also had the pleasure of witnessing her superb design skills in the university’s magazine published every month. Her passion to give back to the community through volunteering is obvious through her thesis essay, and even casual encounters. I strongly recommend her for your graduate program, and am waiting to see her shine.* ”

---

The former is not a bad recommendation.  
It is just a recommendation *written* badly.

---

The professor sticks to merely mentioning facts (scored an A, scored well in assignments, head of design, etc) that the admissions committee already knows, and doesn’t mention any personal observations.

Tying all that together, a good letter should be written by someone who:

- ▶ Has observed you over a period of time in close quarters, frequently
- ▶ Has had positive personal encounters (remember, it's plural)
- ▶ Has a relevance to the program you're applying to

So now, ask yourself once again: *did you pick the right people?*



If you did a good job picking the right people, this step should proceed smoothly.

How well a letter is written depends on choosing the right people *and* providing them with sufficient information for them to do their job well. We thought we would walk you through how we would approach a professor for a recommendation *now*, given all the wisdom we've gathered with the help of hindsight.



## APPROACH IN PERSON

We understand this is not always possible, if your professor lives in a different city (or country). However, as much as you can afford to, schedule some time with your professor so you can request for it in person. If that isn't possible,

request to schedule a call if they know you well enough or send a well-worded email which is what most students resort to. We'll get to the *well-worded* part in a minute.

### **GIVE THEM A REASON TO SAY YES**

To reiterate, you are *not* the only student who is requesting for a letter, and they have a packed schedule as it is. So give them a reason to say yes by being prepared with your request. If you're meeting them in person or speaking on the phone, give sufficient context around the following: why you chose to study abroad, picked that major, and decided upon those list of universities. They would be delighted if you chose a major where their expertise lies.

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In addition to requesting for a letter, you need to provide them with the information they need to fulfill that request.

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Speaking of which,

### **SHARE THE *RIGHT* AMOUNT OF INFORMATION**

Most things in life are not black or white. Rather, they lie somewhere in between. Sharing too little or no information will lead to them writing a short, insipid letter that could hurt you rather than help you. Sharing too much information will overwhelm or, worse, annoy them into writing a subpar letter which could once again hurt you.

Beyond sharing the foundational details, you need to carefully cherry-pick the achievements and highlights you want to mention, to refresh their memory of how amazing you really are. In no specific order, the following are recommended fields to share:

- ▶ Context of your relationship with them
- ▶ Brief description of the program you're applying to and why

- ▶ Resume
- ▶ CGPA (and/or semester wise GPA)
- ▶ List of relevant internships/projects you've worked on
- ▶ Selective list of achievements
- ▶ Selective list of extracurricular and volunteering activities
- ▶ **Instructions to write and/or submit the letter**
- ▶ **Deadline to submit the letter by (you don't want to forget this)**



Ideally, we recommend you **create a document with all the information mentioned above** so they have one or at most two documents to reference before writing your letter.

Putting all that into practice, below is an example of a good introductory email asking for a recommendation, assuming you cannot meet them in-person:

*Subject: Request for Letter of Recommendation [thank you]*

*Dear [Title + Name],*

*I hope you are having a wonderful week so far! Firstly, thank you for taking the time to read this email.*

*I am reaching out to request for a letter of recommendation from you as I am applying for the master's program in Energy Engineering at University of California, Berkeley, USA. My aim is to first pursue a specialization in Solar Engineering, followed by a doctorate degree.*

*One of the main drivers in pursuing this degree were your classes on physics and advanced mechanics. Your way of explaining a concept using real-life case studies motivated me to think of ways I can contribute to climate change by working towards building a sustainable renewable energy source.*

*I would be honored if you took the time to recommend my candidature to the university. I have attached below all the required information that you can use to write the letter, including, but not limited to: my past internship work, publications, transcript, impact through volunteering, and accolades received. Should you need any more information, please let me know. The recommendation is due on Oct 21st, five weeks from now.*

*That being said, I know you have an extremely busy schedule and so I would completely understand if you don't have the time to write this letter. Please feel free to say no. Thank you for taking the time to read this all the way and I hope you have a wonderful rest of the week.*

*Sincerely,  
Neel*

That's it.

A polite, genuine, well-written email goes a long way in strengthening your relationship with the receiver.

If you noticed in the final paragraph, we alluded to something important: *giving the receiver the opportunity to say no*. Why is this important?



Think about a scenario where you only have one restaurant to eat at, or worse, only one dish to choose from. Would you be happy with being constrained to having a single choice, having no freedom to exercise your choice in the first place?

Probably not.

At least biologically, we like to exercise control<sup>[8]</sup>:

“ *We are born to choose. The existence of the desire for control is present in animals and even very young infants before any societal or cultural values of autonomy can be learned. It is possible that organisms have adapted to find control rewarding – and its absence aversive – since the perception of control seems to play an important role in buffering an individual’s response to environmental stress.* ”

When you give the other person the choice to refuse upfront, it helps them feel in control.

---

Paradoxically, giving someone the option to say no might improve the chances of them saying yes.

---

Keep this in mind for not just now, but also for your future encounters with people when you network.



We're almost there. Now that you've chosen the right people and sent out requests for recommendation, it's time to wait. And follow up diligently.



In the *Dream Tracker*, ensure that you mention the submission deadline for each university and **make use of the Add Reminder or other such add-ons**<sup>[9]</sup> to set reminders to be sent to yourself two weeks before so you can notify your recommender.

Assuming it takes the recommender at least four weeks to write and refine your letter, your first contact should happen at least a month or so in advance, and the follow-up should be two weeks before. As soon as you are notified of the submission of the letter, take time to draft another email expressing your gratitude.

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Getting your dream admit requires the help and support of a village, and your recommenders play a key role in that village.

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## TO WAIVE OR TO NOT WAIVE

Every university you apply to will display the following message in the letter of recommendation section of the application<sup>[10]</sup>. This gives you the choice to either *waive* or *not waive* your right to view the recommendation submitted by the professor (or whoever you asked).

Do you waive the right to request access to the information provided by your references? \*

☐ Yes ☐ No

That question above is asking, *Do you waive the right to request access to the information provided by your references?*

Have you wondered why this question is being asked?

We did.



A landmark law titled **Family Educational Rights and Privacy Act (FERPA)** was signed into law by President Ford on August 21st, 1974.

The following is a brief gist of what it states<sup>[11]</sup>:

“ *The Family Educational Rights and Privacy Act (FERPA) (20 U.S.C. § 1232g; 34 CFR Part 99) is a Federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education.*

*FERPA gives parents certain rights with respect to their children's education records. These rights transfer to the student when he or she reaches the age of 18 or attends a school beyond the high school level.* ”

Surprisingly, the law went into effect without offering the chance to be heard by those who were impacted by its enactment. There were no public hearings asking for testimonials from the institutions it affected. The only reasoning offered<sup>[12]</sup> by the Senator who enforced it was that it was in response to "*the growing evidence of the abuse of student records across the nation.*"

This shocked schools and universities across the nation.



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One of the main concerns of the law were the letters of recommendation written by professors under the assumption of confidentiality thus far.

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Did the students have the right to read them all under FERPA? What if the student wanted a sentence to be corrected? Can students sue the professor or the institution for wrongly stating a fact? Some of these questions were put to rest when amendments were made to the hastily enacted law on December 31st, 1974. It barred students from accessing any letters written prior to January 1st, 1975.

Since then, FERPA has undergone many revisions, offering more leeway for schools to disclose the personal information of students to certain entities (such as a school they transfer to or the law enforcement when requested under a subpoena).

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Today, it is *mandatory* for universities to give you the choice to either view the recommendation or waive your right to view it.

---

We strongly feel you should *wave your right* to view it, i.e. choose *yes* in the screenshot shown earlier, for the following reasons:

- **Recommender's view:** Someone who you carefully chose and someone who agreed to recommend you is *not* a person who would write a bad letter (or hopefully, a badly written letter). Many recommenders would draw comparisons between you and other students in their letter<sup>[13]</sup>. If they know you can read that at a later date, they would resort to a rather vague and insipid letter with little specificity. By waiving your right *and* letting them know you did that, you also establish a level of trust with the other person which will help your case further.

► **Institution's view:** The university gives you the right to view because they *have* to. It doesn't mean they encourage that behavior. Not waiving your right can be seen as a mild red flag for universities who might reach one or more of the following conclusions: a) the letter is not candid since it was not written under the assumption of confidentiality, b) the student might have played a part in writing the letter, or c) the student must have a moral obligation to exercise this right.

If that isn't enough reason, you might not learn what you're looking for even when you read the letter, since it would be out of context. Unless you read all the other letters written by your recommender, any conclusion you draw would be inaccurate.

That is why we ask you to waive the right and choose *yes* for that question.

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However, if you choose to view it for personal reasons, notify your recommender of this decision explicitly when you ask them to write you a letter.

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SOMETIMES, IT'S BETTER TO LEAVE  
THINGS AT THE MERCY OF **MYSTERY**



## ... STUDENT TESTIMONIALS

“ *The best strategy to get your recommendation is to first build good relationships with the people you work with, be it your supervisor or internship guide. From my experience, it*

*is better to work with a young professor in a small group. I realized this through my association with an Assistant Professor at IIT Madras, under whom I interned twice. He was a great mentor with whom I built a strong relationship, and we ended up publishing a paper together. He also went so far as to assist me during my graduate applications.*

*The same holds true for my third-year summer internship in Germany. During this internship, I built a good relationship with my supervisor who happened to be a post-doctorate in the group. He later went on to help me obtain recommendations from my professor and was very helpful in reviewing my SOPs. In short, it is all about developing a natural rapport with your professors and guides that will aid you in getting the required LORs. ”*

- Saman Salike, University of California, Berkeley

“ *I felt it was important for my recommendation letters to reflect on me holistically: including my achievements and career goals. If you feel the same, you need to communicate this transparently to your recommenders. I set up meetings with my recommenders and spoke about my future aspirations, what the program was about, and how it would lead me to achieve the destination. After the meetings, I sent them a written document where the aforementioned was elucidated along with a copy of my resume. I also provided details on what skills were necessary for the program and how I have displayed them in various scenarios. By doing all this, I made sure to equip them with the right information to write a good letter.*

*Honestly, writing a letter of recommendation is a time-consuming task and requires huge dedication on the part of the recommender. Hence, do not request for it at the last minute. Follow a step-by-step strategy that gives them the right information and sufficient time. ”*

*- Uchechukwu Ekeopara, Dartmouth College*



## CONCLUSION

You might have begun reading this chapter thinking, what's there to learn about getting a *letter of recommendation*? We hope you feel differently now. A letter of recommendation, when obtained from the right person, can go a long way in getting you admitted. It shows the admissions committee who you are from a third person's standpoint, as opposed to your own.

So begin to note down the list of recommenders based on the Venn diagram we proposed: how long they've known you, how well they know you, and how established they are in their role. The first two factors should take precedence over the third.

As much as you can, approach your recommender in person when you ask for the letter since it is a huge time commitment for them, and not something they enjoy writing. You can make that process easier by being prepared and sending a document with information about your achievements and experiences. A nicely worded email will go a long way. Also, don't be shy to follow up with them. Give a buffer of ten days after your first email to follow up if you haven't heard back.

Finally, we strongly recommend that you waive your right to view the letter . If you have done a good job choosing your recommenders, there shouldn't be a need to view it in the first place. This letter must be written with confidentiality and trust. Once all the letters have been submitted, take the

time to thank them for their effort. You can also go the extra mile to keep them in the loop as you begin getting your results, thus continuing to grow your relationship.

## A LITTLE REFLECTION

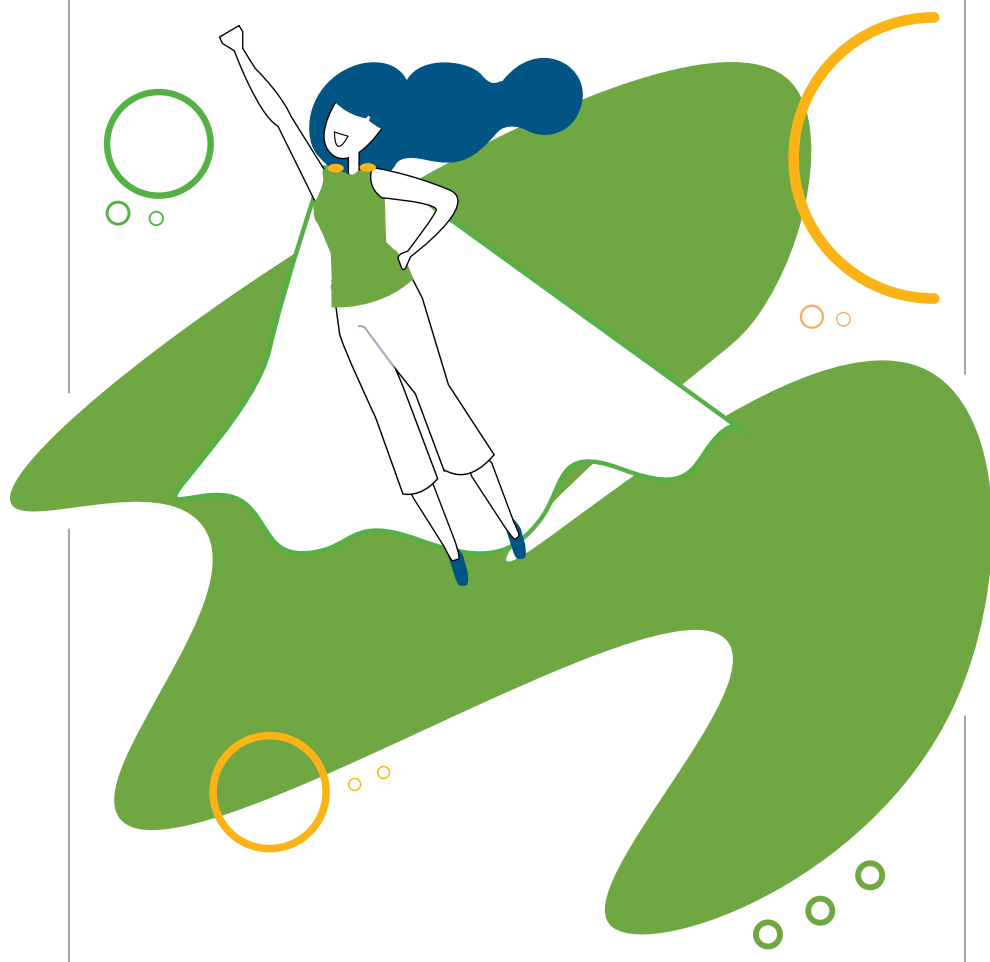
- ▶ Who are three people you have met that you highly look up to in your professional life?
- ▶ What were the top criteria you used while choosing your recommenders?
- ▶ Did you provide them just the amount of information they would require?
- ▶ Aside from an email, how else can you say thank you to your professors? Think about it



Chapter  
**09**

**GOING THE  
EXTRA MILE**

Time to tackle the optional  
parts of your application



I always tell aspiring Product Managers that being a good Product Manager is not the same as being a good Product Manager *interviewee*. To ace your interview, you need to prepare on five different verticals (product design, product strategy, guesstimation, technical, and behavioral). I remember solving a dozen questions found on Leetcode, figuring out ways to improve all the products I use, and testing myself on a plethora of *how many coffee shops are present in San Francisco* type questions when I was preparing for my interviews.

As a Product Manager, you don't need to code or know the statistics of your city's coffee shops. Rather, you need to be good at collecting requirements and feedback from your customers, building relationships with the various teams you work with, and balancing priorities across engineering, business, and design. Yet, you have to learn things which you don't particularly need for your interview process. Why?

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To make you *think* and be *prepared*.

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## OPTIONAL: TO DO OR TO NOT

We've noticed that some universities also include optional sections in the application which generally manifest in two formats:

- ▶ Making a video introduction
- ▶ Writing an essay on diversity

Every component of your graduate school application is an opportunity for you to reflect on your past and ponder upon your future. Your resume, recommendation letters, and transcripts reflect what you've accomplished so far. Your test scores signify how hard you have been working for the past few months. Your statement of purpose is an opportunity to answer critical questions related to your future.



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Last but not least, the *optional* parts of your application test whether you go the extra mile or not.

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In this chapter, we will briefly talk about the best practices you can follow to make a video and write essays on topics related to diversity.

## MAKING A VIDEO

Your video is a condensed, visual depiction of your story.

The admissions committee can gauge a lot from a few minutes of hearing you talk: your proficiency in English, presentation skills, and intent in pursuing the degree.



You don't need to put yourself in front of the camera if it feels too unnatural or if you feel you won't be able to put your best foot forward by doing it. It's *okay* to skip this part of the application since it's optional.

We just hope you will at least give it a shot!

ALRIGHT, LET'S DO THIS. HOW DO I SHOOT  
A **GOOD ENOUGH** VIDEO?



Hopefully, by the end of this, you will be able to shoot something better than *good enough*. Let's enter the world of cinema for the next few minutes.

## PRE-PRODUCTION: BEING A DIRECTOR

The journey begins. It's now time for you to choose the story that you want to tell your audience, i.e. the admissions committee.

Here are a few ideas to get you thinking. You can choose and go ahead with the storyline that best fits your experiences and aspirations:

### CONNECTING THE DOTS APPROACH

*“ You can’t connect the dots looking forward; you can only connect them looking backward. So you have to trust that the dots will somehow connect in your future. You have to trust in something — your gut, destiny, life, karma, whatever. This approach has never let me down, and it has made all the difference in my life. ”*

You may recognize these powerful words as spoken by Steve Jobs in his famous Stanford Commencement Address in 2005<sup>[1]</sup>. Steve Jobs dropped out of college, got fired from a company *he* created, and escaped cancer very narrowly. None of these events made sense to him when they were happening, yet they all connected perfectly in hindsight to build the life of one of the greatest entrepreneurs of our time.

---

What kept him going was the love he had for what he did.

---



Sit for thirty minutes alone and write down all the disparate events that have happened in your life so far. Do some of those events connect in hindsight to build a clear picture? Can you pick some of them to give a justification for the major you’ve chosen now? What has been a common thread?

As you begin to fill your paper, use the example below as inspiration, written by Sai based on his life's story:

*When I was in high school, I gave equal importance to sports, cultural, and academics. I wanted to be an all-rounder. After graduating with a Best All-rounder Award, I began to pursue my bachelor's in mechanical engineering. While giving due importance to my major, I joined and excelled in my university's public speaking club. Adding to that, I worked in a string of marketing positions at technical and cultural festivals. In hindsight, I realize that engineering management is a field that combines my passion for engineering with my interests in public speaking and marketing. Looking back over the past three years and connecting the dots, I can see why a degree in engineering management is the next best step for me.*

### **BIG IDEA APPROACH**

If there is one person who comes to mind when we think of audacious entrepreneurs, it is Elon Musk.

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Everything Elon Musk does is tied to a *big idea*.

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He founded SpaceX to solve the existential crisis of humankind and help us become a multi-planetary species. Tesla grew out of his goal to save the planet by pushing everyone to use renewable energy. Of all his ventures, my favorite is Neuralink, a recent startup he co-founded to help humans reach symbiosis with artificial intelligence<sup>[2]</sup>.

In a riveting post on Quora, Dolly Singh, the ex-Head of Talent Acquisition at SpaceX describes what it was like to work with him after recounting a pivotal moment in the company's history<sup>[3]</sup>. It was the year 2008. After pouring in millions of dollars, working 70-hour weeks for months on end, and making a wide-spread promise in the press that the Falcon 1 would have a successful launch, Elon Musk and 350 of his employees from SpaceX watched the engine fail during stage separation.

It was a devastating moment in the company's history.

Yet, Dolly says that Elon walked out of his trailer to give a speech that changed the course of the company's future.

“ *I think most of us would have followed him into the gates of hell carrying suntan oil after that [speech]. It was the most impressive display of leadership that I have ever witnessed. Within moments the energy of the building went from despair and defeat to a massive buzz of determination as people began to focus on moving forward instead of looking back. This shift happened collectively, across all 300+ people in a matter of not more than 5 seconds.*

*I wish I had video footage as I would love to analyze the shifts in body language that occurred over those 5 seconds.* ”

Less than eight weeks from that day, SpaceX executed a successful launch of Falcon 1, which became the world's *first* privately built rocket to achieve earth orbit.

Undeterred in the face of all odds, Elon did it.

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What keeps him going through it all are his big ideas.

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Similarly, if you have always had one big idea of starting a food-tech company, writing a science-fiction novel, or curing cancer, then choose this approach. Below is an example template:

*I grew up in a suburban setting with my family owning a 10-acre paddy farm. From a young age, I was exposed to the struggle that my family faced while employing manual farming methods. No matter how hard we worked, the yield was never enough. I decided then that I wanted to spend my career building low-cost technology to aid farmers with their yield. When I was in school, I never missed an opportunity to participate in science exhibitions and showcase my prototypes. After high school, I decided to pursue a degree in Production Engineering to continue on this path. I chose my internships carefully to be geared towards giving me a rounded education. I designed and built machinery, worked on optimizing the supply chain, and even spent a summer working with VTOL drone technology surveying farms. Moving ahead, I have a strong conviction that a graduate degree in agricultural technology and innovation is the next step in fulfilling my dream of developing low-cost automated agricultural systems.*

If you're propelled by one big idea, don't be shy to center your entire video around it.

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Universities love students who can't shut up about something.

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## LINEAR LINE APPROACH

There was once a young boy named Abdul, who was interested in aerospace engineering right from his school days. He displayed aptitude at a very young age by performing well in mathematics and continuously learning about rockets. He then went on to pursue many degrees in physics and aerospace engineering. Not surprisingly, he joined the Indian Space Research Organization (ISRO), where he slowly climbed the career ladder to eventually head the project that launched a series of satellites in near-earth orbit.

The young boy was Dr. A.P.J. Abdul Kalam, also known as the *Missile Man of India*<sup>[4]</sup>.

---

His life is a quintessential example of someone  
who followed a linear route to succeed.

---

Note that this approach might sound similar to the *big idea* one, but in fact, they are quite opposite. If you had a *big idea* from childhood, you center everything you do around it. You do everything with the end in mind. On the other hand, someone with a linear career does not start off wanting to be where they are today. Every experience they've had has made their conviction of an idea stronger with time, and slowly nudged them forward to eventually reach a big idea.

Below is an example template:

*I focused on being an all-rounder in school. I took part in science exhibitions, volleyball tournaments, as well as debate competitions. I wanted to experience it all. When I had to choose a major in college, I picked Computer Science since I've always liked coding and I knew the major would give me the*

*opportunity to work on projects in many verticals. Fortunately, before the end of my sophomore year, I had developed an affinity towards deep learning after working on a few data science projects and witnessing the power of a machine augmenting a human's cognition. So I spent the next two years piling on courses related to big data and AI, participating in Kaggle competitions, and eventually earning a Master title. My proudest achievement was building an AI solution capable of human-like abstraction and reasoning with a very limited dataset. I want to continue on this path and eventually build a powerful model capable of Artificial General Intelligence (AGI), freeing our time to focus on more creative pursuits.*

These are the three widely used approaches. Use them as the backbone, but add your own idiosyncrasies on top of it to truly convey your story.

## **PRODUCTION STAGE: BEING AN ACTOR**

First, you became a director by choosing the story and developing the content. Now, it's time to become an actor (and possibly, a videographer).

Here are two ideas you can adopt while shooting the video:

- ▶ Involve props that display your creativity and/or skill.
- ▶ Shoot in a location that has some relevance to the content of your video. If your one big idea is centered around building low-cost technology to improve agricultural yield, then shoot it in a farm or a field if that's feasible.



Sai followed the connecting the dots approach and split his life into three segments. As he spoke about each segment, he solved one layer of a **3x3 Rubik's Cube** on camera. Once it was fully solved, he picked up another, more complex, cube to metaphorically show that he's entering the next phase in life. And ended it with how the university can help him do that.

Apart from your own voice, there could be other *noises* around the room such as the white noise from a fan, the hum of an air-conditioner, or the *ping* from your phone, not counting human intervention. Alleviate some of these problems by shooting the video in an empty room devoid of distracting noises. If you choose a specific location like we mentioned above, then keep a mic next to you to record the audio clearly.

Let's move to the final phase of making a video.



## POST-PRODUCTION: BEING AN EDITOR

Ideally, you should aspire to shoot the video in one sitting and preferably in the same location. But, if that isn't possible and you end up shooting bits and pieces, no problem! There is enough technology out there that will do the job of stitching these together.

There are three stages in the editing process:

- ▶ **Stitching it together:** Use some of the freely available apps such as Quik, Blender, or Lightworks, to stitch the videos together (assuming it's not a single shot). Sai used the Quik mobile app and managed to edit his entire video in less than an hour. These apps also let you add images and text in between as needed.
- ▶ **Removing noise:** Even after controlling the external factors, there could still be noise that crept into your video. In such cases, we



recommend using software such as Audacity, that is intuitive, user-friendly, and quick<sup>[5]</sup>.

► **Adding music:** A silent background can be considered eerie. So, we recommend you add a mellow background music that does not overpower your voice and keeps the video pleasant.

At the end of it all, you should have a few minutes of video that you're very proud of.

Although this is optional, we sincerely hope you give it a shot. Best case scenario? The university loves it and awards you with an admit. Worst case scenario? You don't get admitted but have a memorable video that will bring a smile on your face after a few years.

Great, let's now switch our focus to the other optional component: *diversity essay*.



## WRITING AN ESSAY ON DIVERSITY

Most universities don't ask you to write essays aside from your statement of purpose. However, we've noticed from experience that some, like Dartmouth<sup>[6]</sup> and Purdue<sup>[7]</sup>, do ask you to write a *Diversity Essay*.



In fact, this essay is a **key requirement** for you to be considered for **certain fellowships** at Purdue University, namely The Purdue University Doctoral Fellowship, David M. Knox Fellowship, and George Washington Carver Fellowship.

These are fun additions to your application as they make you think about questions you wouldn't normally think about.



Who are you and what has contributed to your identity?

How have you shown leadership in the past?

What will you do to improve the diversity at the university?

### WHY DO UNIVERSITIES CARE ABOUT **DIVERSITY**?



Universities consider diversity in the classroom a way to enhance the educational experiences for all students<sup>[8]</sup>.

Imagine this scenario: It is the fifth day of your orientation. The professor in your class begins the lecture with the question, *“how can we solve the energy needs of our future?”*

A brave student raises her hand and shares how in her home country, Barbados, a lot of citizens have begun using electric vehicles that are charged through solar power stations, always present in a 5 kilometer radius<sup>[9]</sup>. Motivated by her response, a student from Australia raises his hand and shares a recent article he read stating that his country is building a large-scale plant to convert natural gas feedback into renewable hydrogen<sup>[10]</sup>. Now, hearing such diverse and novel ideas, you are tempted to speak up and mention how in your home state, Tamil Nadu, more than 25% of the energy consumption comes from wind power thanks to the monsoon seasons<sup>[11]</sup>.

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*That’s the power of sitting in a diverse classroom.*

---

The power of diversity can also be witnessed in international conferences.

One such example is the *Harvard College Project for Asian and International Relations (HPAIR)*<sup>[12]</sup>.



**HPAIR is an independent, non-profit, student-run organization** at Harvard College founded in 1991 to foster discussions on Asian international relations. Presently, it holds two conferences every year, one in an Asian city and the other inside the Harvard campus. These conferences are attended by hundreds of undergraduate and graduate students from across the world, all of whom bring a unique perspective to debate on pertinent topics such as public health and foreign policy. Adding more flair, some of the past notable speakers include the President of Singapore, Crown Prince of Perak, and the Finance Minister of Philippines<sup>[13]</sup>.

When you attend such a conference and take part in intense discussions, your world view will be dramatically expanded. I can attest to this first-hand.



In 2016, I was fortunate to be one among ten students from India to receive the Cargill Global Scholarship, awarded for academic and leadership excellence. The best part of the scholarship was not the scholarship itself, despite being a sizable amount. Rather, it was the opportunity to attend a week-long leadership conference that happened in Minneapolis, USA. In that week, I met 59 other scholars coming from 6 countries. We sat through seminars on key topics related to diversity and inclusion, were put in groups to brainstorm, and asked to make presentations.

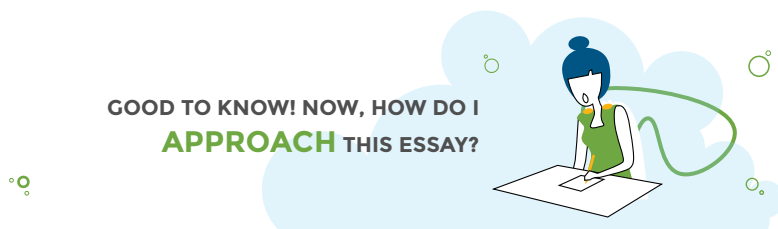
It was exhausting and wonderful.

Aside from the experience inside the classroom, universities care about diversity because *employers* care about diversity.



Employers are no more silent on their diversity goals. To date, Salesforce has spent **\$10.3 million** to fix the pay disparity due to gender, race, and ethnicity<sup>[14]</sup>. Google's 100,000 employee workforce is made up of **32% women**, 41.9% Asians, and the company has more than quadrupled the number of black employees in the past six years<sup>[15]</sup>. Since 2012, the number of Fortune 500 companies with greater than **40% diversity** has more than doubled, from **69 to 145**<sup>[16]</sup>.

Given all the above, universities want to encourage diversity on campus and hence admit students who contribute to that.



Let's look at a real example question. Below is the question prompt given by Purdue University<sup>[17]</sup>:

*Describe your leadership, work experience, service experience, or other significant involvement with racial, ethnic, socio-economic, or educational communities that have traditionally been underrepresented in higher education, and how these experiences would promote a diversity of views, experiences, and ideas in the pursuit of research, scholarship, and creative excellence.*

That is a very verbose question. Once you deconstruct it, you will realize that it's asking you to:

- ▶ Identify an instance from your past when you worked with a community that is underrepresented in the higher education domain
- ▶ Describe your involvement and outcome
- ▶ Connect your past experience to future endeavors



Think hard and identify an instance you can talk about.

Did you ever volunteer at an NGO?

Are you part of clubs or groups that have people who are underrepresented? Have you asked them about their experiences?

Were any of your projects or internships aimed at educating more people?

## THE FOUR STEP FRAMEWORK

We'll walk through a four-step framework to help you construct your essay, and at the same time, write a sample one ourselves.

First, begin the story with your first encounter with the underrepresented community. Try to be as specific as you can with the details.

*I was not expecting to walk out with a heavy heart when I stepped inside the Mahatma Gandhi Orphan Home in Trichy, India on July 22nd, 2018. I had gone there to assist my friend in conducting a class on chemistry for 20 ninth-graders. During a break, I was having a conversation with a teacher there when I heard the bad news. She told me that the students had thus far attended private schools thanks to*

*numerous generous donations. However, the money had run out and they had no means to fund their high school and pursue education further. They were now reliant on a few part-time faculty and students from nearby universities to take one-off classes in lieu of proper education.*

It's very important to set the stage for a story. Be specific on the when, why, and how. Now that your reader knows the problem statement, you can move forward and talk about what *you* did about that.

*I don't know why that deeply disturbed me. I had always taken education for granted and never had to worry about not having enough teachers. Ironically, a lot of my schoolmates tried to skip valuable classes. And here I was, witnessing the opposite. It didn't seem right. So I met my friend after a few days and asked if he would be willing to work with me to recruit more teachers. He eagerly agreed.*

*Within the next two weeks, we had found six others who were interested and passionate about this problem. The eight of us formed a voluntary teaching group named GnanDhaan (meaning to impart knowledge in Sanskrit). After a couple of meetings, we had enrolled all the students in the National Institute of Open Schooling (NIOS) curriculum, which enabled them to directly write school-graduating exams without attending regular school.*

*For the next two years, we took turns to visit the students every Saturday and Sunday from 8 AM to 1 PM. Ten hours*

*a week of our teaching was all they required to grasp the concepts and solve problems on their own during the course of the week. Aside from learning from us, they learned from, and helped, each other. We witnessed this when two copies of the mathematics textbook by R. D. Sharma was enough for twenty students. As weeks and months went by, the orphanage became our second-home.*

The above (fictional) story is a powerful one. Finding a problem to solve is only the beginning. What you *do* about it matters so much more. So pick an instance from your past where you prioritized *execution* along with *ideation*. Don't be modest in going into detail on the effort you expended to solve the problem.

Now comes the most important part: the impact you created.

*Along with GnanDhaan, I was also part of the marketing team for our university's annual festival. I used my marketing skills at GnanDhaan by reaching out to potential sponsors for my students. This involved coming up with innovative campaigns on social media, cold-calling potential leads, and even hosting a few fundraisers.*

*Now, it's been more than 24 months since my first visit. I'm thrilled to say that all twenty of our students passed their tenth grade examination and have enough sponsorship to get them through to graduation. We just had a celebratory event a few weeks ago where the students thanked us by putting up a series of sessions where they taught us a new topic. It was a memorable day.*

Finally, end the essay by connecting your experience to what the university can expect from you in the future.

*I can tell you one thing with certainty after my experience leading GnanDhaan: I will never take education for granted. And, I will continue to help underserved communities get the same quality of education that I do, to the best of my ability.*

*I noticed that one of the clubs at Purdue is catered towards helping international students acclimate to the new environment by teaching them English. While I'm an international student myself, I have a pretty good command over English and would love to eventually be part of that organization. I'm positive that my experience with GnanDhaan will bring a new perspective to the table to help incoming students.*

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Writing an essay on diversity is all about expressing your personality and ideas.

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Pick an experience that brings out those qualities.

We hope the framework laid out helps you take yours to completion.

## STUDENT TESTIMONIALS

**“** *I always knew I wanted to make the video. Many applicants ignore it since it's optional in most applications. However, to me it was an opportunity to lend a face and voice to my statement of purpose and display confidence.*



*Content is not just the king; it's the whole kingdom. What differentiates your video from a hundred others is NOT the visual effects; it's what you say. Please do NOT say in plain words that you are a hard-worker. Narrate a story that convinces the viewer that you are a hard-worker. I also made use of props—Roti (flatbread) and Rubik's Cube—because I was sure very few would do it. Do things that other people don't usually think of doing. There is a moment mid-way in my video, where I turn to look at my degree hung on the wall and the camera moves with me. The point is: the camera is your friend. Instead of making the camera sit there passively, try innovative things and showcase your creativity.*

*"If a picture is worth a thousand words, what's a video worth?" A video is worth an admit. ”*

*- Aniruddh Menon, Dartmouth College*

“ *I had written several SOPs for the various universities that I had applied for in the U.S. and in Europe. None required a more unconventional and out-of-the-box thinking approach than the Diversity Essay and the Personal Statement Essay that I wrote for Purdue University and Michigan Ann Arbor, respectively. Initially, I thought that these essays would require little effort in comparison to the SOP that I had drafted so many times earlier. However, in order to stand out from the plethora of other applicants, I quickly realized that I need to put in a lot more effort.*

*Armed with the powerful tool of introspection, I carefully handpicked the encounters that I had with less privileged*

*people in my college days and blended them with my own set of childhood experiences with people from different cultures. After writing and re-writing it a few times, I got help from a few of my seniors who proof-read it to ensure the message was coming across well. Was it a perfect recipe for success? Not quite, but it instilled in me a work ethic powerful enough to provide an impetus for my career over the next few years. ”*

*- Ravi Ramesh, TU Delft*



## CONCLUSION

Once you begin looking for jobs in the new country, you will realize that a lot of the things you learn for the interview won't be of use in your day-to-day life on the job. Yet, it's important to still learn them because they make you *think* and be *prepared*. Your application process to get admitted follows a similar analogy. Every component of your application says something about you. The *optional* components, asking you to make a video or write an essay on diversity, show that you're someone who goes above and beyond. You're someone who goes that extra mile. We hope you do.

A video is a condensed version of your story. You only get about five minutes to say it, so choose one of the three approaches that we mentioned in the chapter. *Connecting the dots* approach is best if you can see a common thread between disparate events from your past. *Big idea* approach is best if you grew up with a strong conviction of what you wanted to do. *Linear line* approach is best if your career has so far had a vertical path, with every experience leading seamlessly to the next one. While shooting it, think of ways you can infuse your creativity or skill. Sai used props, can you do something similar? Can you shoot in a unique location next to you? All these will grab real estate in the minds of the admissions committee and make you memorable.

Most universities only ask you to write a statement of purpose. But, if yours wants you to also go the extra mile and write an essay on diversity (or another topic), that's great! It gives you one more opportunity to ponder upon interesting questions. Diversity and Inclusion has become a very hot topic right now, and for good reason. You will realize how powerful it is as soon as you sit through a lecture where you hear opinions from students coming from different countries. We gave you a four-part framework you can follow to write this essay: begin with your encounter with those who were underrepresented or underprivileged, mention what *you* did to help them, talk about the impact you created (don't be modest here!), and finally end it with your plans for the future.

With that, you've hopefully reached the end of your application process.

## A LITTLE REFLECTION

- ▶ What prop do you think best brings out your creativity and/or a unique skill?
- ▶ Have you ever felt that you were underrepresented due to your gender, race, or ethnicity?
- ▶ Is there a social organization at the university you're applying to that you would like to join?



## Chapter 10 HITTING THAT **BUTTON**

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And with that, you have reached the end of submitting your applications.

It doesn't feel that way though, does it?

That's okay. That's bound to happen when you've been working on a task for more than four months (or in some cases, even twelve months!<sup>[1]</sup>). In an ideal scenario, you should complete your standardized tests after shortlisting the universities and before beginning the application so that your GRE preparation doesn't collide with writing the SOP.

---

Aside from the time that goes into preparation for these tests, set aside at least three months to work on your application for all the universities.

---

Most universities have a singular application deadline that ranges between early December to mid-January which every applicant must abide by. However, there are outliers to this normal, and they come in the form of *Rolling Admissions* and *Rounds*.



Universities with **Rolling Admissions** review the application as it comes in, and send out the result within four to eight weeks<sup>[2]</sup>. Universities with various **Rounds** in their application process evaluate the applications in batches at the end of each round<sup>[3]</sup>.



## EARLY BIRD GETS THE WORM

In both cases, the advantage of applying early is clear<sup>[4]</sup>. The sooner you apply, the more spots there are to fill and fewer students to compete with for them. You will get your result sooner, which will give you more time to work on the post-admit procedures and let you save money by not having to apply to other universities, assuming this was your first choice. Even otherwise, having an admit on hand will prompt you to apply only to the universities which you had ranked above this. Finally, the universities will know that you are more serious about their program if they see an application land by October as opposed to January.

However, you shouldn't forget to think about the other side of the coin.

---

Is it okay to submit a shabby sub-par application just to apply soon or to meet an earlier deadline?

The answer is a resounding *no*.

---

You should do your due diligence with each application by proof-reading the essays at least a few times, getting recommendation letters from your top choices, and double-checking your resume and transcript. Those who apply earlier are most probably students who are seriously considering that university, and hence would have submitted a strong application. You want to put your best foot forward here. If you feel the universities that have early deadlines and rolling admissions are in your top choice, the best strategy is to simply start early.



I have this ritual at the end of each workday wherein I go over the list of tasks I had accomplished during the day, write down

any highlights or learning points, and glance at my calendar to check the next day's schedule. This gives me a sense of closure. I know that I can safely walk away from my day-time job and begin working on my personal projects (such as this book!).

Try finding such a ritual for yourself as you near the end of completing an application. You could have a check-in call with your friend to go over the details. You could take a walk and go over the application in your head. Do anything that will give you a sense of closure knowing that you've given it your best (or at least a pretty good) shot and that it's okay to move on.

If you've been closely following the guidance provided in this part of the book, it's time to take a break after you are done submitting the applications.

*You did it!*

Now, turn your attention over to the other parts of your life that took a backseat so far. In the next part of the book, we'll dive into what you can do before and after receiving the admits to finally choose your dream university.





# Chapter 11

## APPLYING FOR SCHOLARSHIPS

Time to take the first step  
to become financially independent



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*The only way to fund myself is through loans* is one of the most common myths while applying to graduate school.

---

We say that from personal experience.



After I was done applying to all the universities, I began focusing on scholarships right away. Fortunately or not, I didn't have anyone who could guide me on this path, which meant I didn't have anyone telling me that the chances were low or that it's not worth my time. So I applied anyway. I spent dozens of hours spread across a few months searching for scholarships across Quora, various websites, and student forums. In the end, I ended up creating a list of almost 25 scholarships, of varying reward amounts, and about a dozen conferences to apply to in the future. All that was left was to submit an application for each.

I did it incrementally over the next few months. In the end, I ended up receiving the **J.N.Tata Endowment Scholarship**<sup>[1]</sup> and the **K.C. Mahindra Education Trust Scholarship**<sup>[2]</sup>, which covered a significant portion of my tuition. Sai too applied and got selected for the J.N.Tata scholarship.

We understand you might have heard from someone that scholarships are only reserved for the best of the best.

That's not true.

Each scholarship is unique, and has its own set of eligibility criteria and selection requirements. While your chances of getting selected are still low, it's undeniably worth spending a few hours on. Below is a more accurate

version of the myth.

---

*The only way to fund myself is through loans  
if I'm too lethargic to spend a few hours researching  
and applying for scholarships out there with an  
unwavering hope that I will get it even if the  
chances are low.*

---

Now, that's more like it.

However, you are not lazy. Right? You've read this far because the fire in you hasn't died yet. In fact, it probably got stronger. When I got the calls informing me that I was selected for the scholarships, I felt a swelling pride in myself. I realized I found a way to fund myself partially and achieve a sense of financial independence. We want to help you get there.

FIRST TELL ME THIS, WHY DO ORGANIZATIONS  
AND UNIVERSITIES **GIVE** SCHOLARSHIPS?



This is an interesting question to think about. Why is someone funneling money into your career voluntarily while knowing that you are not making any explicit promise of paying back the money, ever?

You must think *goodwill*. True, that's *one* reason, but it's not the only one.

First, scholarships can be given by the following entities: governments, companies, organizations, and nonprofits.



The **J.N.Tata Endowment Scholarship** spun out of the Tata company and the philanthropic philosophy of its founder, Jamsetji Nusserwanji Tata<sup>[1]</sup>. The **Narotam Sekhsaria Foundation**, a non-profit, was set up in 2002 by the eponymous founder, also an entrepreneur and visionary<sup>[3]</sup>. The **Fulbright Scholarship**—if you remember from Chapter 1—was concocted by a U.S. Senator who championed international goodwill through exchange of students in education, culture, and science<sup>[4]</sup>.

The intention behind scholarships can vary depending on the source:

- ▶ Governments give scholarships to promote the economy of the country by sending its citizens abroad in the hope that they return to the country better educated and able to contribute
- ▶ Companies give scholarships to boost their Corporate Social Responsibility (CSR) and be competitive in a job market where job seekers have vast options
- ▶ Organizations and nonprofits give scholarships in many cases because of an elite philanthropist who believes in the value of education

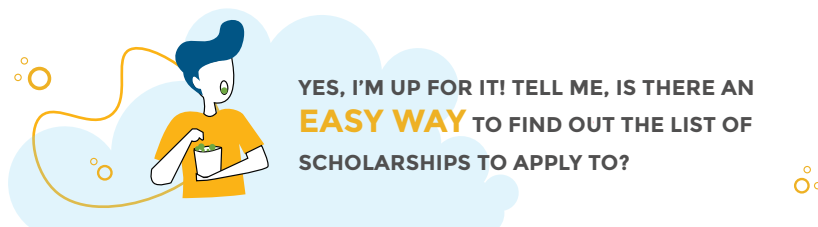


Although you might think that scholarships are given on a no-strings-attached basis, many of them have a **clause somewhere that you need to satisfy** post receiving the scholarship.

For example, the J.N.Tata scholarship required me to report my GPA at the end of every semester to the Trust to remain in good standing and receive the rest of the money. Other examples of attached strings include returning to

your home country after a period of time<sup>[5]</sup>, and demonstrating financial inability at the time of application<sup>[6]</sup>.

In all cases, by bestowing upon you the scholarship, the institutions expect a level of excellence out of you either in the immediate or long-term future. To do that, *you* must first expect excellence out of yourself to satisfy that clause. Are you up for it?



Yes... and no. Sorry.

Yes, because of the boom in information technology that democratized collective human knowledge to everyone with an internet connection. *No*, because of the boom in information technology that has made finding relevant information exponentially harder.

So the process of finding the list has become easier, but it still requires dedicated research to pick out the right ones to apply to. Let's look at a few ways to generate this list first:

## ALUMNI

More often than not, if a senior from your university obtained a scholarship, he or she would add it to their public profile on LinkedIn or another social networking site. An alternative is to check with your university's career center. The career center watches hundreds of students travel abroad to study *every year*, many of whom receive scholarships and grants. If they aren't crowdsourcing information from the alumni yet, you need to ask them to begin right away. Apart from gathering knowledge, they can also look for endowments from alumni who might be financially well-off.

ARTICLES AND CROWDSOURCING GROUPS

We cannot stress this enough: take advantage of the articles and forums where your questions have been asked and answered already.

Don't try to reinvent the wheel here.

In-depth articles have been written both for a global<sup>[7]</sup> and India-specific<sup>[8]</sup> audience stating 20+ scholarships to apply to.

Quora, Reddit, and Facebook (with the help of past students) have done the work for you already. Join the various information sharing groups in these sites where you will have access to the accumulated wisdom of the past and present students. Ask questions (and answer the ones you can to help others). Some students get pretty specific with theirs<sup>[9]</sup>.

The College and University Master's Program Experience +8

**Where can I find electrical engineering scholarships for masters abroad for a Ugandan student?**

Answer

Follow · 2

Request

DEDICATED WEBSITES

If you want to go beyond the information you obtained from past students, you can make use of the numerous websites that are dedicated to keeping an updated list of all scholarships.

| India Specific                                                              | International                                                 |
|-----------------------------------------------------------------------------|---------------------------------------------------------------|
| MHRD Government of India<br>Buddy4Study<br>Study Guide India<br>Motachashma | World Bank Scholarships<br>GoGrad<br>IEFA<br>We Make Scholars |

All the above details are specified after carefully perusing each website to find out if they have useful and relevant information. *Yet*, don't forget that scams are unavoidable in such sites.



Before you even think about applying, understand the indicators of scam<sup>[10]</sup>: **asking you to pay money to apply, asking for personal information (Aadhar, PAN, credit card, passport, etc), or asking you to *not* do anything and simply fill in the basic details.** If something seems too good to be true, *it most definitely is*.

While there are dozens of resources out there, the onus is still on you to spend time hand-picking a few of the above (or all of them, if you're really motivated) and going through each portal, choosing the right filters (host country, major, degree), and combing through each scholarship to see if it's a fit.

---

Honestly, we feel that spending some time picking the ones to apply to is a small price to pay for a big prize in return.

---



ALRIGHT, SOUNDS GOOD. SEEMS LIKE  
I'VE GOT A DECENT AMOUNT OF  
**RESEARCH** TO DO.

Yes, but before you leave, we thought it might be helpful to create a database of scholarships based on *our* research as well. We curated a list of 20 *general* scholarships, and 10 *women only* scholarships which can be found in the

*Scholarships* sheet in your Resources folder. Each scholarship has details about the eligibility, award amount, and deadline to apply. We've added the deadline based on 2020 since it was the latest available information, so be sure to check the deadline for your year of application.

However, keep in mind that this is an ever-evolving list.



Many of the scholarships I applied to in 2017 are outdated now, and new ones have sprung up since. So while we will periodically update this (once a year), you need to **do your due diligence** and spend a few hours researching on your own. And hey, if you find something that we missed, please do let us know.

We made this list specifically for *you*, someone who took the time and money to purchase and read this book. We cannot curb plagiarism altogether, but we hope you will honor our request when we ask you *not* to share this (and the other resources in the folder) across widely.



Yes. Before you begin your research and applications, we wanted to mention a few more sources of funds to keep in mind that can help you in the future. Apart from scholarships, you can offset your graduate school cost through **assistantships** and **part-time jobs**.

## ASSISTANTSHIPS

Graduate Assistantships (GAs) are the ideal path to earn and learn at the same time. You work for a predetermined number of hours every week in



exchange for a waiver on some or *all* of your tuition and a possible monthly stipend. What more, GAs are an attractive addition to your resume, as aptly described on University of Louisiana's website<sup>[11]</sup>.

“ Graduate assistantships are professional positions. The experience you'll get looks great on a resume and holding such a position will give you that professional experience that employers (or doctoral programs) are looking for. For master's students applying to doctoral programs, an assistantship on your resume is a feather in your cap and demonstrates that you have experience, that your master's program recognized you as the best of the best. In many research fields, if you didn't have an assistantship, those PhD programs you're applying to may wonder why. And if you're planning a career in academia, an assistantship is essential for getting the teaching and research lab experience you need. ”

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Graduate Assistantships can come in two forms that are most common:  
Research Assistantship and Teaching Assistantship.

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In simple terms, **Research Assistants** assist professors on hardcore research whereas **Teaching Assistants** assist in preparing class materials and grading (and sometimes teaching)<sup>[12]</sup>. Sometimes, you will also come across other types of assistantships. I was a *Course Assistant* at Columbia where the responsibility entailed grading assignments, and at times assisting the professor with classes. Understandably, it also paid less since it required fewer hours. The bottom line is, *look for assistantships* in all forms.

Universities are generally vocal about GA openings and send out the application to all students to fill in. However, if that's not the case for you (or even if it is), proactively reach out to your graduate program coordinator and ask for the process to be followed.

---

Since these are coveted roles that pay handsomely, you will see fierce competition from other students.

The best way to stand out is to begin early.

---

If you're looking to be an RA, you need to directly approach the professor who can be your potential supervisor. We don't have personal experience approaching professors for an RA position, but at the very least we can recommend that you *don't* use a generic email template and bcc ten professors at once<sup>[13]</sup>.

## PART-TIME JOBS

In India, the concept of universities offering part-time jobs on campus is virtually nonexistent. Thus, when you encounter this concept in the U.S. and elsewhere, it might seem surreal. You get to work for up to 20 hours a week (or more under special circumstances<sup>[14]</sup>) and earn money to support yourself financially as you earn a degree.



The pay for a part-time job varies based on the state you're in, but the minimum wage in most states is **between \$7 and \$10<sup>[15]</sup>**. If you worked **20 hours a week for \$10 an hour, that's \$800 a month**, a pretty sizable amount that will cover most or all of your rent and other expenses.

---

We know it sounds attractive, but remember that money is not your greatest asset in graduate school.

*Your time is.*

---

Unless you are in a dire financial situation, strike a balance between earning enough money for your living expenses and capping the number of hours so as to focus on more important activities such as assignments and job hunting. Ideally, you should cap it at ten hours, so it doesn't eat up more than two hours a day. However, make this choice based on the job and kind of cognitive resources it entails.

The job itself *can* be useful based on its tasks. Categorizing based on the location, you could find a job at the library, administrative office, athletics/fitness center, career center, and cafeteria. At least, these are the major sources. There will be many more specific to your university<sup>[16]</sup>. If you end up becoming a librarian, you could leverage the quiet environment to focus on other hobbies, such as reading or listening to an audiobook. However, if your role is to be an examiner, that wouldn't give you time to focus on your own tasks while you're working.

---

It's up to you to find a job that you're qualified for, pays reasonably well, and gives you *some* flexibility.

---

To be proactive, take a look at the university website a month or two before you begin your program and email the various offices offering part-time roles. Similar to the assistantships, the demand will always be greater than the supply. You need to find non-traditional means to obtain a role, by either networking with your seniors who had it or knocking on the door of the office directly to show your interest.



I was a mathematics tutor for undergrad athletes. I got the job by talking to seniors, getting a list of roles I can apply to, and directly going to the athletics office (more than twice) and expressing my interest. It turned out to be one of the most flexible jobs on campus. The pay per hour was extremely high (\$40, compared to the \$11.8 minimum wage<sup>[15]</sup>) and the working hours were mutually set by me and the student per our convenience.

The downside was they capped the number of hours per week, so I could not earn more than a certain amount per week even if I had the time to do so. Still, it was a convenient way to earn some pocket money for my living expenses, spending a mere three to four hours a week.

So while you're applying for scholarships, keep in mind the other ways you can fund yourself in the future and make a note of them somewhere.

We also came across two university programs that offered *free* education: NYU Medical School<sup>[17]</sup> and Washington University Medical School<sup>[18]</sup>. If you are planning on becoming a med student, that's a pretty sweet deal.

### ☰ THREE THINGS TO REMEMBER

As you go and begin your application now, keep the following in mind: **First**, the importance of applying on time cannot be overstated.

---

The people on the other side see things as black and white. If you miss your deadline, or apply when you're not eligible, it *will* be an outright rejection.

---



I applied for the PEO Peace Women's Scholarship<sup>[19]</sup> on time, but the professor who submitted my recommendation did it two hours after the deadline. So they told me they cannot accept my application. I emailed back explaining the situation and the why, but this was their response:

I am truly sorry, but there are no exceptions on the deadline.

I spent *weeks* preparing my application, but all they could see was a two-hour lapse. After sending a few more passionate emails explaining the effort I put into the application, I realized they wouldn't budge. I ended with a long passive-aggressive monologue criticizing their black and white perspective on things. I never got a response to it, but it helped me anyway as a form of catharsis.

We hope you learn from our mistakes and *send your applications in on time*, or earlier, because they will not show you mercy.

**Second**, know that bagging scholarships is a numbers game: the more places you apply to, the better are your chances. There are not many high-paying scholarships (>\$10,000), but there are plenty of *micro-scholarships*.

---

Instead of putting your eggs in a really big basket, try diversifying and applying to more of the small scale ones, where you have a better chance.

---

**Finally**, we know getting a scholarship can be a huge ego-boost. However, unless this is a true necessity for your higher education, don't spend time on this at the expense of filling out your applications, which is what will decide

whether you have a chance to go in the first place. This should always remain a second priority.



## CONCLUSION

We are optimists, so hearing someone say that it's not possible to do something doesn't always make sense to us. Now we know from experience that it *is* possible to obtain scholarships and fund oneself through other means. We are not discounting the effort it takes to apply or the very low chances one has of obtaining them. We are simply saying it's possible, and worth giving a shot.

First, start with your immediate seniors and ask them the ones they have heard of (or obtained). Next, hunt for these in crowdsourcing groups on websites such as Reddit and Facebook, where you have access to the knowledge of the masses. Finally, if you want to go the extra mile, do your own research through the websites we mentioned and curate your list. We didn't want to just give you the tool here though. Out of personal curiosity, and to save a few hours of your time, we found a list of 20 general and 10 women-specific scholarships you can apply to. Start from there.

Apart from scholarships, you can also fund yourself through assistantships and part-time jobs. The former pays well and may even waive your tuition altogether, while the latter can be used to offset your living expenses. Neither of these concepts are widely prevalent in India, so it might seem extremely attractive at first. However, because they are attractive, the demand outweighs the supply. So begin your research early in both cases, and keep a conscious eye on the number of hours you're signing yourself up for (especially for a part-time job that doesn't add direct value).

Coming back to the scholarships, check the eligibility requirements and deadlines very carefully, apply to a diverse set of scholarships, and put in your application early. I would hate to see you make the same mistakes I made.

Hopefully, you end up getting one (or more) to fund yourself. When you do, be sure to pass on the optimism to those who come after you.

## A LITTLE REFLECTION

- ▶ How important is it for you to obtain a scholarship?
- ▶ What are the other means through which you can fund yourself? Does your university offer GAs and part-time jobs?
- ▶ Assuming you obtained a scholarship, how can you help your juniors now?





# Chapter 12

## PREPARING FOR INTERVIEWS

Time to suit up and  
talk to a computer screen





I remember dressing up in an orchid pink Allen Solly shirt (the only one I had back then) and black high-waisted pants to have a conversation with a laptop screen. In my undergraduate university, girls had a curfew that prevented us from stepping outside the fortified walls of our hostel after 9:00 PM on weekdays. So, I had to resort to sitting inside the common room on my floor, desperately hoping that no one would walk in, as I had my interview at 11:30 PM. The internet connection failed me twice, and finally worked the third time, just long enough for me to answer five pre-recorded questions that flashed across the screen.

*What does ethics mean to you? (unexpected)*

*Tell us about one project that really interested you. What did you do and what did you gain out of it?*

*What does Management Science and Engineering mean to you?*

*What are your favorite topics to study?*

*Do you have any questions for us?*

I anticipated many of the questions I was asked, in this and other interviews. However, in reality, your aim should not be to anticipate questions.

---

You should focus on deeply introspecting on your life and having a loose framework with which you can answer *any* curveball they may throw at you, which they will.

---

## 📍 THE MIGHTY NITTANY LION

Universities in the U.S. (and probably elsewhere) are very vocal about their motto and mascots. One university archivist even went so far as to co-author a book on his alma mater's mascot, titled *The Nittany Lion: An Illustrated Tale*<sup>[1]</sup>. Students in the U.S., especially those pursuing their undergraduate degree, anthropomorphize these mascots to reflect the qualities that they wish to embody. Just look at how poetically the authors describe the Nittany Lion<sup>[2]</sup>:

“ *The Nittany Lion became a part of our lives soon after we reached Penn State. The Shrine [of the Nittany Lion] is more than just another location on campus dedicated to some tradition or another: it is the embodiment of what we believe Penn State represents. First and foremost, anyone who has looked into those big eyes knows that it is one smart lion - having, of course, studied at the land-grant university he protects. He is powerful, yet not overbearing; regal, yet not snobbish. The Nittany Lion Shrine symbolizes Penn State's past accomplishments while reflecting its hopeful future, which is key to Penn State's success in all its academic and athletic endeavors. No school symbol does that better than Penn State's Nittany Lion.* ”



If you didn't know they were talking about a person wearing a mountain lion's gigantic suit, you might be tempted to think that the Nittany Lion was the majestic founder of the university. All this is to show you just how *passionate* the universities are about the way their values are portrayed to the outside world.

Even after you graduate, you will forever spell out their name every time you are asked to introduce yourself. The diploma you receive will be seen by hundreds of people who visit your home. Although the mascots seem to steal the spotlight, the universities know that the primary way to echo their values is by choosing students who *fit* well into the mold they've created over centuries. If you have been asked to participate in an interview, you are already well above the baseline of the average applicant.

---

They now want to see if you are as good in person  
as you are on paper.

---



Sure thing.

An interview can be categorized into three layers: The General, The Academic, and The Personal. The following are the most frequently asked questions under each category.

### THE GENERAL

- ▶ Tell me about yourself
- ▶ Why do you want to study at our school?

- ▶ Why do you want to study this major?
- ▶ What do you hope to do after you graduate?
- ▶ Why should we accept you?
- ▶ Where else are you applying? (always mention at least two other places, but end with the reason why their school takes precedence over the others)

### THE ACADEMIC

- ▶ How have your past research experiences prepared you for a career in this area?
- ▶ What was the most innovative research idea you worked on?
- ▶ What has been the impact of your research?
- ▶ What are your career goals? How does this program help you get there?
- ▶ What courses did you enjoy the most in your college? Why?

### THE PERSONAL

- ▶ What is your most significant achievement and/or failure?
- ▶ Who has influenced you the most? Why?
- ▶ How do you cope with stress?
- ▶ What motivates you to do what you do?
- ▶ What does teamwork mean to you? How do you lead a team?

And of course,

- ▶ *What does ethics mean to you?*

The above are some hand-picked samples. However, we suggest perusing a few more resources online, either posted on student forums<sup>[3]</sup> or university websites<sup>[4]</sup>, to create a master list of questions.



Of course! As mentioned earlier, anticipating the right question is not the key to winning this game. Even if you happen to be the best orator of your batch, you still need to practice tirelessly like everyone else. The approach you take matters, not your well-rehearsed response. We will pick one question from each of the categories above and walk you through the approach.

## THE GENERAL

Let's start with the one that will follow you for a long time: ***tell me about yourself***. This is a pithily worded monster of a question as the answer can range from talking about your childhood dream to recounting what you learnt from your worst failure. *Because* there is no boundary to the degree of variability, students wreck their mind trying to come up with a response that is interesting, memorable, and concise. The paradox of choice<sup>[5]</sup> can be crippling, so use the following framework by an academic consulting firm that we found to be useful<sup>[6]</sup>.

---

Do not use this as an opportunity to  
regurgitate your resume or history.

---

Remember, *they have already seen it*. They are looking to understand what made you, well, *you*. What made you spend that summer volunteering abroad? Why did you choose to become a class representative? Why did you choose to focus on optimization of traffic in metropolitan areas for your final year project? Every decision we take has meaning behind it, which might not always be obvious. Let's find out now.

Take a pen and paper (or post-its) and create three columns.



First, if you only had one day left to live, what are the **top three activities** that you would spend the day working on (assuming you already said goodbye to your loved ones)?

Really think about it. Let me help you out. If it were me, I would write, sing and play the guitar, and host a mini-conference on a topic that I'm passionate about. Think about the activities that make you feel exhilarated, either mentally or physically (or both). Write down each of them in the first column.



Secondly, write down **why you picked the activity you picked** in the second column.

Assuming you wrote down reading books, playing video games, and playing football, the reasons could be the following:

*Reading books: learning something new and having time to introspect*

*Playing video games: being in a community and solving critical problems*

*Playing football: working towards a common goal and pushing physical limits*



Finally, once you're done with figuring out the *why*, **try connecting the reasons** mentioned in the second column to how they can help you in the major you're hoping to pursue.

If you were to pursue a research oriented master's, all the skills mentioned above become useful. You just need to explain exactly how. At the end of this

exercise, you should have something similar to the following in front of you for all the activities listed.

| Activity         | Reason                                                    | Connection                       |
|------------------|-----------------------------------------------------------|----------------------------------|
| Reading Books    | Learning something new and having time to introspect      | Core trait of a researcher       |
| Playing Games    | Being in a community and solving critical problems        | Needed to work on team projects  |
| Playing Football | Working towards a common goal and pushing physical limits | Also applies to cognitive limits |

Begin weaving a chronological story that connects some of these elements (doesn't have to be all) to result in a story that would be refreshing for the admission committee to hear. The following is a (fictional) example:

*I grew up in the suburbs of Eastern India spending most of my evenings at my father's car mechanic shop, watching him interact masterfully with the customers, and always getting their vehicle fixed. Since I used to finish my homework early, I would help my father in handling the finances. Occasionally, I would also tinker with the cars and motorcycles parked there by disassembling them. The accounting work I did there helped me develop a love and skill for math that boosted me academically.*

*Eventually, my ninth grade teacher asked me to teach mathematics at a non-profit nearby designed to help kids who were mentally and physically challenged. It was hard at first, as I had no experience teaching. However, I learned how to teach from my mother, who held dance classes every evening. As I worked with these kids for years, I could clearly see the potential they had and how the limiting factor was something beyond their control.*



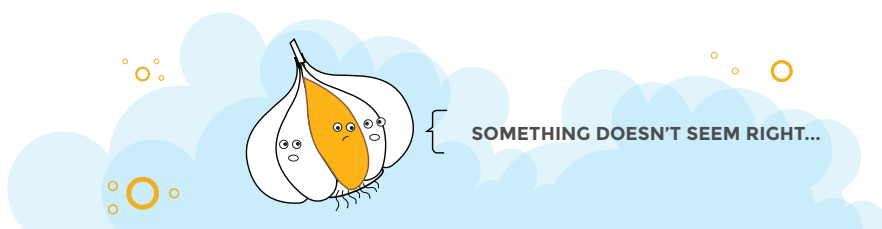
*Before I left my home to pursue my undergrad, I knew I wanted to work at the intersection of neuroscience and robotics, but I didn't know exactly what I wanted. I spent the past four years taking as many courses as I could in these disciplines and gaining experience working at companies and universities. I'm the type of person who loves spending days stuck with one problem until that liberating moment of eureka arrives. What defines me is a sense of focus and perseverance, which has gotten me this far. I hope this will get me to your university.*

You can see from the example above that this fictional human being is good at math, teaching, and observing others (and learning from them). All of this is in addition to hopefully a shining resume filled with experiences. As the interviewer hears such a story, they can begin to connect the words they read on paper to the person in front of them, and see if this fits within their archetype of a student at their university.

---

Know that sometimes, even if you're a brilliant candidate, you might not be a good fit for *that* particular program. And that's okay. Not everywhere you fit is where you belong.

---



For the other general questions on why you're looking to join a particular university and major, simply pick out a few unique selling points that you

noted down in Chapters 2 and 3 that prompted you to choose them in the first place.



We humbly request you to **not mention the rank of a university as a reason** to join it. Mentioning it would prompt them into thinking that you didn't care to scratch beyond the surface and learn more about their department.

## || THE ACADEMIC

The questions under **The General** focus on what *you* hope to reap out of the time you spend at the university. In return, the university will also get a lot out of you, monetarily and otherwise. **The Academic** focuses on what you can bring to the table and how you will collectively help advance the position of the university by working on new areas of research, publishing papers, obtaining funding, and attracting more students.

A commonly asked question here is: ***how has your previous experience prepared you for this degree at our university?***

---

The question is asking you to talk about your relevant past experiences as well your plan to utilize them for future research at the university.

---

Let's assume that you plan to pursue your graduate degree in Computer Science at the University of Washington. If you were to prepare for this question, your first stop should be the page that shows the areas the department focuses its time and money on<sup>[7]</sup>. Pick the area that resonates most with your past work and future aspirations (for now, assume it's security and privacy<sup>[8]</sup>), and hop on to the page<sup>[9]</sup> dedicated to the research in that area. In this case, the Security

and Privacy Research Lab lists 14 projects they've worked on in the past (as of this writing). They also link you to over a dozen people (faculty, doctorate students, research scientists) who themselves have dedicated pages that go into more detail on their academic hopes and dreams.

This trove of information can be overwhelming, but try to follow a similar three column methodology like before—mentioning the research work you've done in the past, extracting the learning threads from it, and connecting it to a specific area that the lab is currently working on. The following is a real-life template written by a mechanical engineering graduate:

*I'd like to share a story here. During my third year internship at [university], I got an opportunity to design an ankle exoskeleton from scratch, as part of the Assistive Robotics Lab. Designing the entire structure, including the motor selection, was a tipping point in my career as it gave me an insight for what I wanted to pursue next in my career.*

*I developed an interest to learn the control algorithms and electrical interfacing behind these devices. Considering my ambition was to build products catering to different needs, I decided that learning all the related fundamental concepts from my domain first will help me become a better engineer. I had built several products with hands-on manufacturing and assembly techniques for mechanical devices, so I wanted to specialize in algorithms and interfacing components next.*

*I was going through the projects of different labs at [university] and found that [professor]'s work perfectly aligns with my interests. I noticed the members of the lab are developing an autonomous prosthesis using gait analysis and feedback from different sensors.*

*Fortunately, my second year internship at [university], where I devised a mechanism for propelling a wheelchair, involved reading a lot about gait analysis and MATLAB optimization toolbox.*

*With my past research experience and related coursework at [university], and with my coursework related to control algorithms at [university] in first semester, I strongly believe my learning curve to get started with research work on new concepts related to algorithms and interfacing will be minimum, as I have the necessary background.*

## THE PERSONAL

The previous two categories focused more on your actions during situations. This category focuses more on your *reactions* to situations.

---

The university is trying to gauge how you react to the negative and positive implications in life: stress, success, pressure, inspiration, failure, and more.

---

A common player in this field is: ***list down your strengths and weaknesses.***



Many people interpret that the question is asking them to list down one of their strengths and *one of their strengths masqueraded as a weakness*. Don't be one of those people.

Admitting your weakness shows humility, but you should also follow it with the measures you've taken or are taking to combat the same. Sometimes, your

greatest strength can also be your greatest weakness.

### YOUR STRENGTH

This is not a wish-list of the qualities you wish to possess. For that reason, whatever strength(s) you end up writing down, run it by your supervisor and/or friend who can attest to it. If you picked your strength to be *empathy*, wrap a story around it that portrays this quality. Generally, talking about strengths comes easier to people. Below is a fictional example:

*A strength of mine that always comes to my mind is my ability to empathize. I grew up listening to stories that my mother read in the magazines and heard on the radio. Many of these were stories of people who overcame great struggles in life. I have an imaginative mind, so every time I heard these stories, I would put myself in the shoes of the protagonist and play out scenarios. This helped me tremendously when I had to lead a diverse team in my undergrad. I was able to tap into their thinking and help them when they faced an issue. In a way, my ability to empathize made me a better leader.*

If you were applying for medical school, empathy to the extreme is not a good quality. However, if your dream is to become a Human Rights lawyer, then this would be one of the top qualities they would expect from you.

---

While picking strengths can be an easy job, pick the ones that have a direct correlation with your degree.

---

### YOUR WEAKNESS

*Working too hard* is not a weakness. *Being a perfectionist* is also not one. This question is probing you to be self-aware and accept things objectively (to the extent possible). Like before, you can begin with stating your weakness and

following up with a story or state multiple instances when you've observed it. We also recommend stating your mitigation plan in the end:

*A few months ago, I noticed that I struggled with asking questions in front of an audience. In hindsight, I noticed that throughout my high school I asked questions only when I met with my professors in-person in their office. Even then, I would hesitate greatly. This affected my performance on a group project that clearly required open communication and asking questions to each other. I ended up having to assume a lot and did not meet my team's (or my) expectations. Lately, I'm overcoming this by pushing myself to work in group projects and asking questions openly. I'm also learning from a friend of mine who exuberates confidence whenever she speaks in the class.*

Lacking confidence in asking questions is a serious weakness for a researcher. However, by being honest about it and detailing the actions you're taking to overcome it, you will put their mind at ease. As a final tip, if you are asked for both a strength and a weakness, start with your weakness so you can end with a positive note on your strength.

### RULE OF THREE

Finally, for all of the questions, follow the rule of three if you can. What is the rule of three?



The rule of three is “a writing principle that suggests that a **trio of events or characters is more humorous, satisfying, or effective** than other numbers”<sup>[10]</sup>. This applies to both written and verbal communication.

Try to begin noticing the occurrence of this (in the book and elsewhere). You will be surprised at how prevalent it can be. During the interview, use this rule to give your response in three parts wherever possible.

\_\_\_\_\_  
You know what you want. You know why you want it.  
\_\_\_\_\_

Tell this to yourself before you begin the interview. Walk in with the end in mind.



Mostly, but not always. In a brief survey we put out, 75% of the 200 respondents mentioned that their interviews happened via a video call, while the rest 25% mentioned it was through a pre-recorded system. We have rarely, if ever, heard of a student who was flown to the U.S. for the interview (if you were, let us know!).

When you are done writing down the responses to all the questions in your master list, practice saying them out loud in front of a mirror as well as with a confidante of yours.



Do you remember we said you choose the university as much as they choose you? Time to say it again.

---

You choose the university as much as they choose you.

---

Even if the interview is pre-recorded, it generally ends with a question that asks you for any questions you might have. Use this opportunity to dive into two or three questions that have been on your mind a lot. Below are some common ones:

- ▶ What is the biggest strength of this program?
- ▶ What are the career outcomes for students in this program?
- ▶ What kind of experiential learning opportunities are offered by the department (e.g. TA, RA, Co-op, Internships)?
- ▶ Is the environment more collaborative or competitive?
- ▶ How easy or difficult is it to customize the program to my area of interest?

Again, the above questions depend on who you're speaking with and your priorities. If your interview is with a human, don't forget to send them a thank you note after you finish the interview.

## BACK TO THE BEGINNING

We began this chapter by talking about missions and mascots. It is important that you read the mission statement<sup>[11]</sup> of the university before you sit for your interview. Every university, and even departments, have their own mission statements and values. The following is the mission statement of Harvard College for liberal arts and sciences<sup>[12]</sup>:

“ *The mission of Harvard College is to educate the citizens and citizen-leaders for our society. We do this through our commitment to the transformative power of a liberal arts and sciences education.*



*Beginning in the classroom with exposure to new ideas, new ways of understanding, and new ways of knowing, students embark on a journey of intellectual transformation.*

*Through a diverse living environment, where students live with people who are studying different topics, who come from different walks of life and have evolving identities, intellectual transformation is deepened and conditions for social transformation are created. From this we hope that students will begin to fashion their lives by gaining a sense of what they want to do with their gifts and talents, assessing their values and interests, and learning how they can best serve the world. ”*

Even if the language is slightly abstract, you can pick out some key cues from it: Harvard encourages diversity with respect to your background and the majors you pick. They want to build leaders out of you, and appreciate a student who has the ability to adapt and evolve over one who does not.

Reading this will fill you with a sense of purpose and excitement, especially if you can relate deeply to the values mentioned in there.

## CONCLUSION

The interview is the first instance the university gets to connect mere words on paper to a real, breathing human being. This is your chance to show them how all of the experiences from your past align perfectly with what you're looking for. The interview itself can be divided into three parts for ease of preparation: *The General*, *The Academic*, and *The Personal*.

*The General* is for them to understand why you took the decisions you took. Why that university? Why that major? Why now? Why you? These are not easy questions to answer; especially the last one. Use the framework we provided by connecting what you've done to what you learnt to how that will

help you in the future. It's nothing new. However, few students actively think about it. *The Academic* is for them to see what you can bring to the table. How have your past experiences prepared you for this venture? What are you interested in? How will you add value to the university? This should be easier to answer if you did a good job choosing your major and universities. *The Personal* segment is for you to explain how you *react* to situations. How did you overcome a major failure? Work with an unpleasant colleague? Pick your answers carefully, as they have to be both genuine and *not* too personal.

The interview will happen through a video call. Recently, universities have begun to outsource this task by setting up a system that displays questions and records your answers, which they will later evaluate. So, learn to speak into a computer, and practice rigorously with your friend and a mirror. Learn from my mistake and ensure you are in a quiet environment with a sufficiently fast internet connection before you begin. You know what you want. You know why you want it. You've got this!



## A LITTLE REFLECTION

- ▶ Which question took the most time to write an answer to?
- ▶ Did you find a way to respond by following the rule of three?
- ▶ Did you identify a friend of yours you can practice the answers with?
- ▶ What are some little things you can do to enhance your interview experience?

Chapter  
**13**

**PICKING YOUR  
DREAM UNIVERSITY**

Time to become a maximizer  
and make the decision





*“...Everything happens for a reason, so wipe that tear off your face and move on. You are strong. You can do it. You will get through this.”*

I came across a short letter I had written to myself after I received my first admit result. It was 12:52 AM on February 17th, 2017 when I received an email from the Chemical Engineering department’s Co-Chair at MIT. It began with the all-too-familiar *I’m truly sorry to inform you*. I remember crying silently into my pillow that night. The second blow came within a week on February 23rd, from HEC Paris, for their Master’s in Management program. I had attended an interview for this program which I thought went very well. I guess I was mistaken. And within the next two days, the third rejection came from Yale. In hindsight, I can see I had a next to impossible shot with the Yale Silver Scholars program—which is an accelerated MBA program for students to join right after their undergrad—given my research background. Nevertheless, the blow hit hard back then. Yale was my dream university.

Those three rejections, within seven days of each other, deeply affected my mental state. On the outside, I maintained a posture of humility and kept reciting how I had low expectations. However, my mind screamed with optimism. Around that time a year ago, in 2016, I had obtained all the three scholarships I had applied to for the summer. That made me complacent, and arrogant. I assumed I had a good shot with all these universities. That week changed it all, and reset my expectations.

Just as I obtained a slew of rejections in a week, I also obtained admits from Cornell, Columbia, and Dartmouth within ten days. Every selection email I received was a momentous occasion. I would first call my parents, then let my brother know, followed by a few close friends. And every time, someone would post about it on a WhatsApp group and I would eagerly respond to those who congratulated me.

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Some choose to keep it private, others gain satisfaction from sharing it with those close to them.

Whichever side you belong to, record some of those moments.

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If you've managed to bag an admit, or multiple admits, we could not be more thrilled for you. Congratulations! We want you to take a screenshot of your selection (and rejection) emails. Write a brief letter to yourself to metaphorically give yourself a pat on the back. Go out for a walk and eat your favorite dish. Throw a modest party for your closest friends who helped you before, during, and after, your admission cycle. You've put in an incredible amount of work to get here, and you deserve to celebrate it how you see fit.



If you do not (or did not) get your dream admits, on the other hand, *it is okay to feel dejected*. It is an indication that you put in a lot of effort. You are entitled to shed a few tears and shield yourself from the world for a little while. However, after that, you have to move on. There's no other option.

Many students tend to receive more than one admit (side note: Sai received admits from all the seven universities he applied to!<sup>[1]</sup>). Specifically, if you

followed our guidance from Chapter 3 and picked your universities right, there's a good chance you have a few admits in your bag right now. So, you're in a dilemma on making the final choice.

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There are good problems and bad problems in the world.  
What you have right now is a *fantastic* problem.

---

It is still a problem though, since you probably have less than two weeks to make an important decision. Let's see how we can help you make that choice!

## SATISFICER AND MAXIMIZER, REVISITED

Remember our economist friend Herbert Simon<sup>[2]</sup> from about two hundred pages ago? It's been a few months for you, so let's go through a quick refresher.



Simon coined the term ***satisfice*** to strike a distinction between classical and behavioral economics. Classical economics posits that we are all *maximizers* who strive to get the very best out of every decision we make. However, this assumes that we are rational and armed with the information needed to make that *optimal* choice. Simon proposed that this is rarely, if ever, the case, due to the limits of human cognition. Rather, he suggests an alternative route wherein the decision maker can be a satisficer by finding optimum solutions for a simplified world, or by finding satisfactory solutions for a more realistic world.

In both cases, the satisficer is happy to walk away with a *good enough* solution that meets the threshold set by them, as opposed to the best possible one.

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You were a satisficer when you were trying to pick  
the universities to apply to.

Now, we want you to be a maximizer.

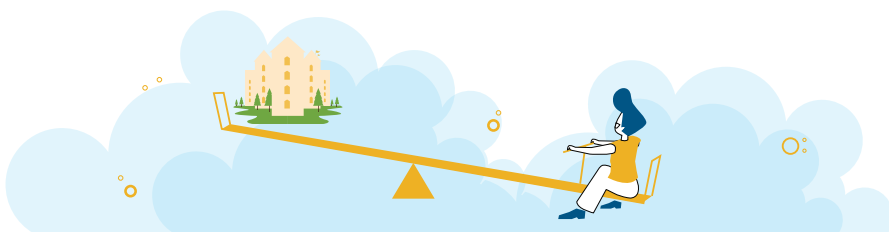
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Let's revisit the example of purchasing a house. At first, you were browsing dozens of listings to eliminate the ones that did not fit your minimum requirements and applied to the top ten that did. Guess what? Your bid got accepted in three places! Now, you have to go inspect each of them in person and create a bigger list of factors that will affect your everyday experience of living there. Is there an HOA fee? How much will it cost to fix the roof? What are the neighbors like? Until you got your bid picked, all these questions were reserved for the imagination. Now, they have become very real and we want you to be a maximizer since the stakes are high.

The good news is, as the need to optimize increased, *your world also became much more simplified* with limited choices for you to choose from. At first, you were trying to select from hundreds of universities. And now, it is just a handful.

Until you received those selection emails from the universities, the ball was in their court.

Not anymore.



## ■ ■ THE QUADRANT FRAMEWORK, REVISITED

Time to open your ***Dream Tracker*** again.



Navigate to the *Choosing Universities* sheet where you have a trove of information on each university already. We told you in Chapter 3 that you would make your future self's life a lot easier by doing all the research diligently. If you did, thank your past self now. If you didn't, that's okay too. Re-read Chapter 3 once again and apply the quadrant and framework we gave you for *just* the universities you got an admit from.

In fact, let's revisit the quadrant once again.

| Requirements                                                           | Academia                                        |
|------------------------------------------------------------------------|-------------------------------------------------|
| CGPA<br>GRE<br>TOEFL<br>IELTS<br>Tuition                               | Courses<br>Research areas<br>STEM Certification |
| Career                                                                 | Miscellaneous                                   |
| Top Career Paths<br>Average salary<br>Internship & Placement Statistic | Ranking<br>Location<br>Personal Dealbreakers    |

Three things need to be fixed above:

- ▶ First, the *Requirements* isn't needed anymore now that you've been selected.
- ▶ Second, we need to add a few more factors that you can look at now since your world has been simplified.
- ▶ Finally, since you saw this for the first time, a lot might have changed in your life. Maybe a university gave you a scholarship or you obtained one from external sources. Maybe you got a response from a professor in one of the universities who agreed to be your supervisor. Or, something happened in your personal life that needs to be taken into account. Whatever it is, it has to be incorporated here.



| What's new?                                                                                                          | Academia                                                                                                |
|----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| <mention any new factors that need to be considered to make a choice>                                                | Courses<br>Research areas<br>STEM Certification<br>Industry Partnerships<br>Assistantships/Scholarships |
| Career                                                                                                               | Miscellaneous                                                                                           |
| Top Career Paths<br>Average salary<br>Internship & Placement Statistic<br>Alumni Feedback<br>Career Center Resources | Ranking<br>Location<br>Clubs and Organizations<br>Sport Facilities<br>Personal Dealbreakers             |

That's more like it.

When you were choosing the universities to apply to, your mind was primed to think about *elimination*.  
Now, approach this problem from the standpoint of *selection*.

## T LEARN FROM THE T

There is a famous saying when it comes to hiring: *look for someone with T-shaped skills*<sup>[3]</sup>.



The *T* here is a metaphor that conveys that companies want someone with both **breadth-wise and depth-wise skills**, indicated by the horizontal and vertical bar of the symbol *T*. Think of the T-shaped person as a “*jack of many trades and master of one (or a few)*”. The earliest reference of this goes all the way back to a paper published in 1978<sup>[4]</sup>. Since then, it has been referenced in various articles<sup>[5]</sup> as a way to encourage people to acquire skills across varied fields.

We will now use this mental model<sup>[6]</sup> to help you make the final choice.

## THE VERTICAL

When you were eliminating universities to apply to in Chapter 3, you were using just a few factors on surface level. You might have used some hard requirements you set for courses, research, and location, to do the elimination. Now, you have the luxury to go deeper into all the factors that you deemed to be important back then. We will talk about *Academia* and *Career* in specific.

### ACADEMIA

Courses and research are still the most important factors that will define your experience. You already spent some time looking at the course catalogue, research areas, and professors' pages in the beginning. Now, we need you to dive deeper into these areas and get more questions answered.

**Courses:** Revisit the work you had already done in the *Choosing Universities* sheet and go over the course website once more for the universities. Back then, we asked you to think about the single most important factor that mattered to you with regards to courses. Most of you might have had something on the lines of, *I want to study x, y, and z topics during my graduate school.*



Now, how can you go a layer deeper? The following are a few examples:

*I want to have flexibility in choosing at least one course from the business school and journalism school respectively*

*I want to take a course that lets me work on a project in interdisciplinary teams*

*I want my department to provide specialization tracks so I can pick the one on Integrated Devices*

Write down a few of these use cases and begin your hunt to find out if the universities satisfy them. Like before, rank these so you don't treat them all with the same priority.

**Research:** There is a good chance you heard back from a few of the professors you wrote to in the past few months. If you followed the guidance in Chapter 3, all the universities you got an admit from must at least have the opportunity for you to pursue research in your area of interest.



Now, how can you go a layer deeper? The following are a few examples:

*I want to work in a research lab that has published papers in the ICML conference before*

*I want to have access to a cyclotron to conduct my research*

*I want my supervisor to provide me with a research assistantship that will fully waive my tuition*

## CAREER

In Chapter 3, we asked you to look at the placement statistics, top career paths that alumni chose, and a range of the salary. Unlike *Academia*, it isn't easy or straightforward to dig deeper here.

So, you need to turn to a qualitative but high quality resource: *current and past students*.

You can find them either by going to the department's student directory<sup>[7]</sup> or by using the filters on LinkedIn<sup>[8]</sup>. They have lived through it all: attended career fairs, networking events, and career center workshops. They can attest to the level of support provided by the university in securing internships and jobs.



Before you send out a dozen LinkedIn requests asking to schedule a call, spend some time thinking about the questions you want answered.

Having been through the process, we recommend you focus on the following topics:

*In retrospect, what helped you most in securing your internship?*

*How much of a role did the career counselor and department play?*

*What career path did you think you would end up in when you joined, and is that different from what you do now? What made you change?*

*What was something surprising about the recruitment process, both good and bad?*

Like you, there would be a dozen others reaching out to them. So, ask yourself how you can use that knowledge to your advantage. Our suggestion would be to acknowledge that you value their time and propose multiple options through which they can help you. The following is an example message:

*Hi Siya,*

*With great excitement I wanted to let you know that I received an admit from the Energy Engineering department at Duke University. I have two weeks to make a decision between Duke, Cornell, and UW. Given the peak season of getting admits, I understand you must be approached by others as well. I wanted to ask you a few critical questions related to the assistance provided by Duke in you getting your job (congratulations, by the way!). To be respectful of your time, I'm proposing a few alternatives below. Let me know what the most efficient way for you would be.*

- ▶ *If you already responded to someone else who asked a question on this topic, please feel free to copy and paste the response.*
- ▶ *If you prefer to type the responses at your own convenience, here [link] is a google doc with the questions I wanted to ask. Feel free to add hyperlinks to resources there.*
- ▶ *If you prefer to have a 20 minute call to field the questions, here is a Calendly link [link] you can use to book a slot. If none of those times work for you, let me know and I can accommodate to your liking. Or, send me your Calendly link if you have one.*

*I'm sure you know, this is an important decision in life. I've learnt from experience that the best way forward is to talk to a few people who've tread the path before. Thank you so much in advance!*

The example message above is specific to asking questions about career, but you can use this template for any topic.

## ■ THE HORIZONTAL

While narrowing down universities, you looked at a few factors at the horizontal level and selected your top universities. The T-shape was more like a “—” back then.

In the previous section, we asked that you paint the vertical bar of the T by going deeper into a few critical factors.

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You need to complete the T-shape by considering a few factors we disregarded before, breadth-wise.

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**Academia:** We looked at courses, research, and STEM certification in Chapter 3. The second layer of research here involves spending some time searching for factors such as possible industry partnerships and assistantships available, which we covered in Chapter 11.

**Career:** If you were able to speak to a few past students, then you might have covered this already. However, beyond looking at the top career paths and placement statistics, take time to go over a few other resources provided by the university for your job search: the events calendar of your department<sup>[9]</sup>, resources provided by the career development center<sup>[10]</sup>, and in general all forms of content from your alumni.



I wrote an article for every month of my graduate school and made it a series with its own catchy title<sup>[11]</sup>. Every article was a mini-diary entry from the past month on something new that I learned. I have been told by my juniors that reading the series gave them a good idea of what is to come.

Although mine was more general than job specific, look out for alumni from your school and major who did something similar, in the form of a blog or video. With YouTubers such as Harnoor, Yudi, Parth, Nitin, and more, there is no dearth of information out there<sup>[12]</sup>.

**Miscellaneous:** Now is a good time to take into account a lot of the extraneous, miscellaneous factors such as the living expenses, sport facilities, and student clubs that you didn't look at before.



I realized after joining Columbia that they did not have a dedicated badminton court. The basketball court was used to play badminton on Tuesday and Thursday nights. For an intermediate

player like me, it wasn't a big deal. However, if you are a state or national champion, I'm sure it matters a lot to you.

We listed some factors based on our experience, but this is a highly subjective quadrant so we recommend you add more factors that matter to you.

## BACK TO THE SHEET

At the end of all this T-talk, go back to your best buddy, the *Dream Tracker*, who has kept track of all your work so far.



**For the vertical bar** where you dived deeper, keep track of your findings and modify the scores for each of the columns accordingly. You also don't need to resort to using just numbers. Add a new column to record the qualitative feedback and information you obtained from your research.

**For the horizontal bar** where you looked at newer factors, create new columns once again to record your feedback.

Finally, add the relevant information from the ***What's New?*** quadrant for each of the universities, if any.

With that, you are armed with everything you need to make that decision.

## THE FINAL ELEMENT

We all build our own frameworks to get to the solution here. The way I chose the university to study at is different from the way Sai, or anyone else, did.



Sai told me that he loved the four years he spent in Trichy, even if he didn't put a lot of thought into choosing to study there. When he got admits from all the seven universities he applied to, he took the opportunity to dive deeper into each to find the most optimal one. He made a list of the five most important factors based on research that will affect his experience, and asked his seniors and mentors to rank their importance. The five were: curriculum, reputation, tuition, weather, and proximity to the industry. He chose Dartmouth in the end due to the flexibility of coursework, reputation as an Ivy League, and scholarship offered to offset the tuition.

On the other hand, I certainly did not *love* Trichy, but I loved the limited freedom and independence I had. From my viewpoint, Trichy was a city with too many temples, sparsely populated restaurants, and a single theatre (at least in my time). Even before I sat down to evaluate the admits from Columbia, Cornell, and Dartmouth, a part of me knew I would choose Columbia. Maybe I chose Columbia for its reputation and course curriculum, that let me work as a student consultant for startups in New York. But maybe, a small part of me chose Columbia for New York. Maybe I wanted to get away from the austere environment for a while and immerse myself in one that was chaotic and exhilarating. It's hard to tell the difference.

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We tried our best to quantify this process for you with  
spreadsheets and scores.

However, we can't ignore the human element amongst it all.

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Use all the information you consumed to educate yourself. And then make the decision with that human element.

## CONCLUSION

Here ends a very long journey of yours. We don't remember a lot of things that happen in our lives, but there are these key moments that are impossible to forget. Receiving a *Congratulations!* email from your dream universities is definitely up there on that list. These moments are precious, so do your best to record them in your head as a mental picture, or better yet, take a screenshot of the email and celebrate with your loved ones in the way you see fit. If you didn't meet your expectations on the other hand, know that it is *okay* to feel dejected.

That just shows how much effort you put into this venture. But with time, you will learn to move on to the next. There's no other option.

We revisited the concept of satisficers and maximizers once again. About a hundred and fifty pages ago, you learnt to be a satisficer. You learned to find a satisfactory solution for a complex world by using limited, critical factors to eliminate the universities to apply to. Now, we need you to do the opposite. Be a maximizer. Your world has been greatly simplified. You only have a few choices in front of you and enough resources to dive deep and find a near-optimal solution. To help you with this process, we spoke about the T-shaped mental model.

The T-shaped model, generally quoted during a hiring process, can be used to dive deeply and explore widely. Dive deep into the factors you had used previously while you eliminated the universities. Write down more use cases for *Academia* and *Career*. Reach out to the alumni to learn about their job search. Tease out the other factors that will matter to you, ranging from sport facilities to research assistantships. At the same time, look at a few more factors that you did not consider a few months ago, and collect information

on them. Everything you learn must go into the *Dream Tracker*, so you can make a well-informed decision in the end.

However well-informed though, the human element will (and should) come into play somehow.



## A LITTLE REFLECTION

- ▶ What is a miscellaneous factor that you did not consider when you were choosing universities to apply to?
- ▶ If you had to guess, what's the human element that helped you make the final decision?
- ▶ What is something you want your future self to know right now?

## Chapter 14 PASSING ON THE GRATITUDE

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There was a story that I read when I was in 9th grade that has stuck with me throughout the years. You must have read it too. It was titled *The Bishop's Candlesticks* and was one of the chapters in my English textbook<sup>[1]</sup>. The play's protagonist is an incredibly generous man, almost too generous to a fault, who goes by the title *Bishop*. The entire play occurs in the Bishop's cottage where an escaped convict breaks in to demand food. The Bishop treats the convict as his friend, feeds him, and gives him a place to stay. In turn, the convict steals the Bishop's beloved candlesticks only to be caught by the police as he tries to escape.

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The final minutes of *The Bishop's Candlesticks* is a powerful reminder of what generosity can do to a damaged soul.

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Victor Hugo said it best<sup>[2]</sup>,

“ As the purse is emptied, the heart is filled. ”

Research has shown time and again that by helping others, you help yourself<sup>[3]</sup>. In fact, helping someone else by donating money is found to trigger the same mesolimbic regions in your brain that are triggered by receiving monetary rewards yourself<sup>[4]</sup>. In a weirdly non-mathematical way, we gain more by giving more.

You got this far in this journey because of the generosity of the professors and managers who recommended you, the teachers who encouraged you when you lost hope in yourself, the friends who cheered you on when things went haywire, the seniors who proof-read your application, and your parents who trusted you to live on your own in a new country. Not to mention the countless strangers who were your faceless guides on the internet. And finally, us (we hope).

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You had a village behind you on this journey,  
even if you didn't know it.

Now, how can you be a member of this village for someone else?

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That's what we want to briefly touch upon here.

## **SHARE YOUR KNOWLEDGE**

I found the joy in sharing my knowledge when I received considerable positive feedback within NIT Trichy on an article I wrote on the theory of general relativity in my sophomore year (which, sadly, I cannot find anymore). Those were the days when physics deeply fascinated me. By learning a new concept and sharing it in an easily digestible manner, I was able to help someone else *and* strengthen my own grasp over it. Win-win.

You can do the same by writing about your journey so that the lessons are cemented in your mind, and also help future aspirants. It doesn't even have to be in the form of an article (or a book). You can participate in webinars, make a video, or simply write answers on a forum like Quora. Be sure to share the important resources you used in this process. You have incredible knowledge built up through this journey.

The world deserves to see it in action.

## MENTOR YOUR JUNIORS

Writing a blog article might help hundreds of students along their way. On the other hand, *mentoring* one student will completely change his or her life. You don't have to pick between the two; you can do both. Mentoring someone goes beyond providing them the resources and talking about what you did.

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Mentoring someone requires that you understand their situation, empathize, and tailor your advice accordingly.

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Pick three to five students who reach out to you when the next cycle of admissions begins. Set up a regular cadence when you can meet them all and be updated on their situation. Share resources, help them with their applications, and find ways in which they can help *each other*. The good thing about generosity is that it is *infectious*. Your altruism will soon be multiplied many-fold as the lives you touch begin to do their part.

## THANK YOUR VILLAGE

You could not have done this without them. Take the time to write personalized emails to everyone you could think of who had a stake in this. Trust me, it is a fun process! I remember thoroughly enjoying writing emails to all the professors who wrote me a recommendation letter. The highlight of it was the responses I received from them as they expressed their happiness.

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If you wanted to thank us in some way, we only ask that you leave a brief and honest review of this book on e-commerce platforms and other forums so more students can discover it.

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We would also *love* to receive an email from you.

Until now, we helped you get admitted! The final and fourth part of the book will help you prepare for what is to come as you leave your home country.

*I want to dedicate this page to thank two people without whom the next two chapters would not be part of the book now: **Siddharth Chamarchy** and **Karthikeyan Eswaran**. Thank you both for working with me to compile the research, brainstorm, and write the chapters on loan and visa.*

# Chapter 15

## SECURING YOUR LOAN

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Time to support  
your dream, financially

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## INTRODUCTION

We hope you took a break to relax after all that hustle for more than six months. Loan and visa are two topics that are almost thought of as a given, that everyone will get them with time.

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*But, valuable information on these topics is neither easily available nor intensely searched for.*

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My father is a veteran banker, so he took care of most of the procedures related to securing my loan. For my visa, I went over a few posts on Facebook groups to look at past visa interview questions, prepared for them, and got it on my first try. However, I ended up taking out a bigger loan than needed, and heard about visa categories such as O1 and EB1 much later in my journey than I would've liked.

Even barring those consequences, I know, in hindsight, that the following chapters contain information that I dearly wish I had known a few years ago. Let's first begin with helping you secure your loan!

### STOP. DON'T SKIP.

We get it. Learning about loans doesn't sound interesting. You would rather spend time taking an online course or setting up your LinkedIn profile (which you can do in Chapter 17).

But before you skip this chapter (and we hope you don't!), read and re-read the following three principles so you don't commit a huge mistake later on:

- ▶ **Loans are *not* the only way to fund oneself.** First, try to source as much money as possible from other sources like scholarships, assistantships, and fellowships, as discussed in Chapter 11, before resorting to a loan.



- ▶ **Traditional banks in India are not the only sources of loans.** We go through three other entities you can look at in this chapter. Also note that you aren't obligated to take out a loan from a *single* entity. For example, if you need INR 30,00,000, you can take out a smaller loan of INR 15,00,000 from two sources that offer a lower rate of interest than from a single source offering INR 30,00,000 at a higher rate of interest.
- ▶ Once you pick the source(s), **follow the do's and don'ts** we've laid out at the end of the chapter. Everything was written based on stories we've witnessed.

If you plan to read ahead, fantastic! We've tried to keep the information simple and easy to follow, but if you come across terms you don't understand, spend a few minutes reading about them online. It'll be worth it.

## ESTIMATE YOUR NEED

Let's start with the foundational question, *how much money do you need?*

Instead of guessing based on your tuition fee, let's go back to our trusted friend, the *Dream Tracker*. Navigate to the sub-sheet titled *Loan Estimation*.



**First**, spend some time reviewing the sheet and the text added below.

**Second**, understand that the numbers added there are a very approximate average. Review each category and edit the numbers to reflect *your* situation. For calculating your rent and food, use the link available next to the table and search for your location. For *Visa and Immigration*, leave it as is unless there's been a change in fee.

**Finally, add a buffer of 10%** on top of the total amount needed, after taking into account scholarships and personal funds. For example, if your loan amount comes out to INR 30,00,000, add a buffer of 3,00,000 on top of it.

Remember, your loan is meant to cover not just your tuition costs, but also your living expenses.

## **\$ LOANS: 101**

Let's start with the definition of a loan.



**A loan is a type of credit vehicle** in which a sum of money is lent by a party to another party in exchange for future repayment of the value. In most cases, the lender also adds interest and/or other finance charges to the principal value which the borrower must repay in addition to the principal balance.

Sounds good? Now, along with the loan, there are a few more terms whose definition you might benefit from<sup>[1]</sup>.

- ▶ **Lender/Creditor:** The party lending the sum of money
- ▶ **Borrower/Debtor:** The party borrowing the money to be repaid later
- ▶ **Principal:** The initial value of the sum of money being lent
- ▶ **Interest:** The amount charged by the lender as fees for the privilege of borrowing money, to be repaid in installments over a period of time
- ▶ **Interest Rate:** The amount of interest charged by the lender for the privilege of borrowing money, expressed as a percentage of the

principal

- ▶ **Finance Charges:** A fee charged for the privilege of borrowing money to be repaid later. It can be a flat fee to be paid once (processing fees, late payment charges, etc), or a percentage of the principal to be paid over the period of the loan (also called interest)
- ▶ **Loan Tenure:** The duration of the loan repayment plan
- ▶ **Loan Documentation:** The document(s) that contain the details, and the terms and conditions, of the loan that is provided. It is a legally binding document which is signed by the lender and borrower
- ▶ **Sanctioned Amount:** This is the maximum amount of money the lender is willing to lend to the borrower
- ▶ **Collateral:** Any asset of fixed value which the lender accepts as security for a loan, such as real estate and property. The value of the collateral is typically more than the principal amount of the loan. It is a form of protection for the lender. If the borrower defaults on their payments and/or is unable to pay the amount, the lender can legally seize the collateral and sell it to recoup some or all of its losses



Did you know that **credit cards** are also a type of loan<sup>[2]</sup>? Some loans, like a housing loan, are a one-time offering. On the other hand, credit cards are simply an open-ended line of credit, that keeps revolving. Once you pay back the amount for a month, you can take out again for the next time.

## ■ CREDIT SCORE AND YOU

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Your credit score is a measure of your creditworthiness.

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It is calculated based on your credit history, which includes the following factors: current debt (if any), debt history, repayment history, length of credit history, etc. If someone were to lend you money, they would want to look at your credit score to answer the question: *will this person pay me back my money on time?* The higher your score, the more willing they would be to give you their money.



In the U.S., the credit score ranges between **300 and 850**. In India, it ranges between **300 and 900**. While the range differs per country, having a higher score is better everywhere.



In 1956, engineer Bill Fair teamed up with mathematician Earl Isaac to create **Fair, Isaac and Company (later renamed to FICO)**, with the goal of creating a standardized, impartial credit scoring system<sup>[3]</sup>. By 1958, they began pitching their first credit scoring system to 50 American lenders<sup>[4]</sup>. Fast forward thirty years, they created a general-purpose credit score system we now call the FICO system.

Since then, FICO has become the industry standard in the U.S., and is used by most lenders, if not all. As of 2020, the FICO score is evaluated by the three major credit bureaus: Experian, TransUnion, and Equifax. These three bureaus share the information on an as-needed basis when a lender, such as a bank, requests for it.

Switching back to India, there are four companies licensed by the Reserve Bank of India (RBI) to collect and compute credit information: CIBIL, Equifax, Experian, and CRIF Highmark. Each of them offers their own

proprietary credit score, based on the 300 to 900 scale. Of these four, CIBIL's score is the most popular one, and is evaluated by the TransUnion CIBIL Ltd<sup>[5]</sup>, which maintains credit files on 600 million individuals and 32 million businesses. The CIBIL score was first introduced in 2007 as India's first generic risk scoring model for banks and financial institutions.

Whenever you make a transaction relevant to your credit score, such as making a payment using your credit card or paying off a loan, your bank sends the details to all four companies, as mandated by the RBI.



Of course, we understand the curiosity!

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You can get your credit score for *free*  
from any of those four companies.

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In exchange, you will need to provide your personal data, such as PAN and mobile number. Still, it's worth checking your score to see where you stand. In India, a good credit score is typically between 650 and 750, and anything above that is great. In the U.S., a FICO score of 700 or above is considered good, while a score of 800 or above is considered great.



Credit scores do *not* follow you around the world. Even if you have an excellent credit score in India, your credit history will have a clean slate when you move to the U.S. If you're thinking, *can I then escape a bad credit history by moving abroad?* The answer is no. This is because when you apply for a visa to a foreign country, your debt *will* be examined. If you have large debts (and therefore a bad score), it will raise suspicion and will most likely lead to refusal of the visa<sup>[6]</sup>.

## BACK TO EDUCATIONAL LOANS

So far, we learnt about loans and credit scores. Let's switch our focus to the main topic now: educational loans.

Educational loans can be of two types: **secured** and **unsecured**.

A **secured loan**, also called a loan with collateral, is where the borrower is required to provide collateral of some form, which is of greater value than the value of the principal amount. An **unsecured loan**, one without collateral, as the name suggests, is a loan where the borrower is *not* required to provide collateral of any form. Instead, the borrower will be judged based on the 5 C's<sup>[7]</sup>.

- ▶ **Character:** This can include your credit score, employment history (if any), and references
- ▶ **Capacity:** This can include your current income and debt, if any
- ▶ **Capital:** This deals with your current net worth, including but not limited to money in savings or investment accounts, investments, deposits, etc
- ▶ **Conditions:** The terms and conditions of the loan

► **College/Course:** This deals with the university and course you have chosen to pursue. It takes into account the reputation of your chosen university along with your academic performance so far.

In brief, a secured loan is more common and gives you a lower interest rate, more lenient terms of repayment, and a higher sanctioned amount. If you have collateral of any sort, go for a secured loan!

## ❖ THE FOUR KINDS OF ENTITIES

We said it before, and we'll say it again.

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Traditional banks are *not* the only source to secure a loan.

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The educational loan market is a very lucrative one, and there are plenty of other players who offer competitive terms to get more customers. Your strategy should be to get a free quote from players across the market, compare the offerings, and pick the ones that suit your needs best. We will go into more detail on how to compare loan offerings later in this chapter. For now, let's learn about the four kinds of entities.

### TRADITIONAL INDIAN BANKS

Let's start with the one we all know about: traditional banks. There's a good chance you can name at least five banks off the top of your head. Go ahead, try it.

Traditional banks can be subdivided into two broad categories: **private sector** and **public sector**. A public sector bank is one in which the government owns the majority of shares. State Bank of India is a good example, where the government owns 58.6% of shares, as of July 2019<sup>[8]</sup>. A private sector bank, on the other hand, is one where most of the equity is owned by private bodies, corporations, institutions, or individuals. Some common examples are ICICI and HDFC.

Since public sector banks are owned by the government, they offer a lower interest rate *and* a lower sanctioned amount. You also get sub-par processing times. On the other hand, private banks have higher interest rates, but offer better service and slightly better processing time.



Actually, there's a third category in there: Small Finance Banks (SFBs). To explain that, you first need to know what a Payments Bank is. **Payments Banks** are a new banking model licensed by the RBI to cater to low-income households<sup>[9]</sup>. These banks offer bank accounts (which can hold up to INR 1,00,000) but cannot issue loans or credit cards. *However*, the catch is, once they complete **five years** of operations, they can get an SFB license, which would allow them to begin lending money. Payments Banks like India Post and PayTM have shown interest in obtaining this license (and by the time you read this, they might have obtained it already!).

So, be sure to check on this since they might offer low interest rates, being new players.

## TRADITIONAL U.S. BANKS

Even before we talk about the traditional U.S. banks, it's worth mentioning that the U.S. offers federal loans through something called the **Free Application for Federal Student Aid (FAFSA)**<sup>[10]</sup>.

FAFSA is a form that you need to complete to determine your eligibility for financial aid. The good news is, federal aid is offered at a lower than normal interest rate (at times lower than 3%) and does not require a credit check. Once a FAFSA is submitted, your school works to identify the financial aid package you are eligible for and the federal government directly issues the



funds to the school to cover your costs.



Only those who are **U.S. nationals, permanent residents, or eligible non-citizens** can apply for the federal student aid program<sup>[11]</sup>. Check your eligibility, and if you fall under one of those categories, then don't think twice about it. Go ahead and apply.

Most of you might not be eligible though, and that's okay! You've got plenty of other options. Let's look at them now.

The major traditional banks in the U.S. that offer loans are J.P. Morgan Chase, Goldman Sachs, Wells Fargo, Citibank, and Bank of America. Most of them also have an offering specifically tailored for international students. There are two scenarios you will face here:

- ▶ **Co-signer:** Just like how a collateral is an *asset* that gives the lender some peace of mind, a co-signer is a *person* who promises to pay back your loan if you are not able to. Your co-signer needs to be a U.S. citizen or permanent resident, preferably with a good credit history (> 690 credit score). From our experience, co-signers are generally relatives or close friends who have been in the U.S. for a while.
- ▶ **No co-signer:** You can still get a loan without a co-signer, and even without a credit score. But (there's always a but), these kinds of loans are what the industry refers to as **subprime loans**, or high-risk loans, that have pretty bad terms. The terms would most probably be worse than what you get in India, or your home country. We do not recommend this option unless you have exhausted all other options.

Whatever option you go ahead with, *always get a quote* since it's free to do so and you never know what terms they might offer.

That being said, there *are* other solutions on the market which need not involve a traditional bank.

Enter Neobanks.

## NEOBANKS

Neobanks is the answer to the question, *what would banking look like if it went completely digital?*

Neobanks are a new type of fintech entity that rose to prominence in just the past 5-10 years<sup>[12]</sup>. Here are a few of their characteristics:

- ▶ They operate *exclusively* online, meaning no physical branches
- ▶ They offer digital services, often mobile-only
- ▶ They leverage latest technology (like machine learning) to provide services customized to their clients

They have two ways of operating: **independently** or by **partnering with a traditional bank**.

The former kind obtain their own banking licenses and operate on their own. The latter are banks which do not have their own banking licenses, and instead partner up with a traditional bank to provide their services. Now, why would they do that?



In India, RBI, as per its 2014 guidelines, **requires banks to have a physical presence** in order to obtain licenses<sup>[13]</sup>. Hence, the only option for neobanks in India is to partner with a traditional bank and offer services. Some popular ones include InstantPay, NiYo, and RazorpayX (by Razorpay).

On the flip side, the U.S. has no such restrictions, hence neobanks can obtain their own licenses (although not all have received them yet). Some popular ones include Chime, Varo, Aspiration, and Social Finance Inc. (commonly known as SoFi).

Anish Achuthan, CEO and co-founder of Open Financial Technologies, says<sup>[14]</sup>:

“ [paraphrased] For traditional banks, it is difficult to change their legacy technology for which they have already spent a lot. Neobanks, on the other hand, are small and nimble. [...] Although all banks offer transactions through UPI (unified payment interface), customers prefer non-banking apps such as Google Pay and PhonePe, which offer the service in partnership with traditional banks. ”

In 2020, due to the COVID-19 pandemic and subsequent lockdowns, all industries moved their services online, and the banking sector was no exception. We can be sure that even post-pandemic, many of these changes would remain in place. Our speculation is that, with neobanks forming an integral part of the banking space, RBI might choose to offer regulatory support and eventually permit neobanks to receive banking licenses even if they operate independently. Keep an eye out for that.

In conclusion, neobanks offer many advantages over traditional banks—personalized offerings, competitive terms, real-time service (for payments, balance checks, etc)—and you need to take advantage of that!

## NON-BANKS

That might sound like an oxymoron for this chapter, but bear with us.

Thus far, all the entity types we saw have been banks of some kind. However, there *are* other fintech entities that offer educational loans, but do not qualify

as banks. In fact, because they are not constrained by the regulations set for a bank, they can do *much more* for you than just offer loans, like:

- ▶ Set up a bank account in the U.S.
- ▶ Refinance an existing loan
- ▶ Provide scholarship options

Let's look at four examples of non-bank lenders and compare them below:

- ▶ **Leap Finance** is based in Bangalore and San Francisco<sup>[15]</sup>. They offer loans without collateral, help you open a bank account in the U.S. before you leave India, and even assist in choosing the courses during your graduate studies. Although established in 2019<sup>[16]</sup>, they have already raised investment of over \$5.5 million from leading angel investors including Sequoia India<sup>[17]</sup>.
- ▶ **MPOWER Finance** is based in Washington D.C.<sup>[18]</sup>. It is a social benefit corporation founded by former international students. Like Leap Finance, they too offer services outside educational loans, such as scholarships and job search preparation.
- ▶ **Stilt Finance** is based in San Francisco<sup>[19]</sup>. They offer educational loans for people with and without a credit score (and even to those who don't have a Social Security Number).
- ▶ **Prodigy Finance** was founded in 2007 and is based in the U.K.<sup>[20]</sup>. They only cater to students looking to pursue their graduate degree abroad. Instead of a fixed-rate option, they offer a variable interest rate option, so the total amount you pay will be tied to the variation of the three-month London InterBank Offered Rate (or LIBOR<sup>[21]</sup>).

| Name            | Loan Amount   | Co-signer and Collateral | Fixed Rate    |
|-----------------|---------------|--------------------------|---------------|
| Leap Finance    | Not Available | Co-signer Required       | Available     |
| MPOWER Finance  | <= \$25,000   | Not Required             | Available     |
| Stilt Finance   | <= \$25,000   | Not Required             | Available     |
| Prodigy Finance | >= \$15,000   | Not Required             | Not Available |



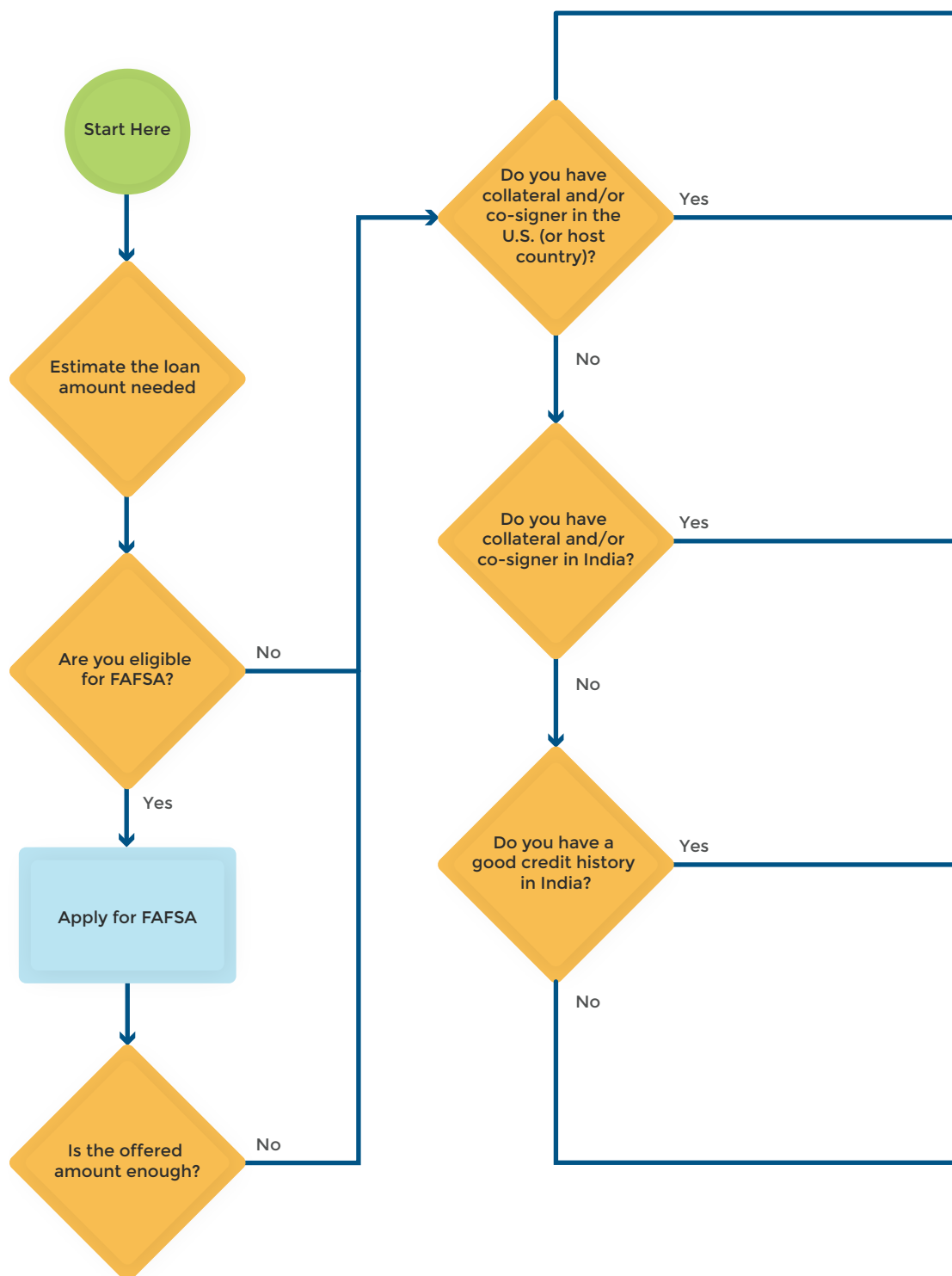
Aside from non-banks aimed at helping international students, you can also look at peer-to-peer lending platforms like the aptly named **LendingClub**<sup>[22]</sup>. Founded in 2006, LendingClub allows borrowers to receive unsecured loans in the range of \$1000 and \$40,000<sup>[23]</sup>. The standard loan tenure is three years, however, five-year tenures are available at a higher interest rate and for an additional fee. They use your credit score, credit history, requested amount, and other indicators to create the terms of agreement.

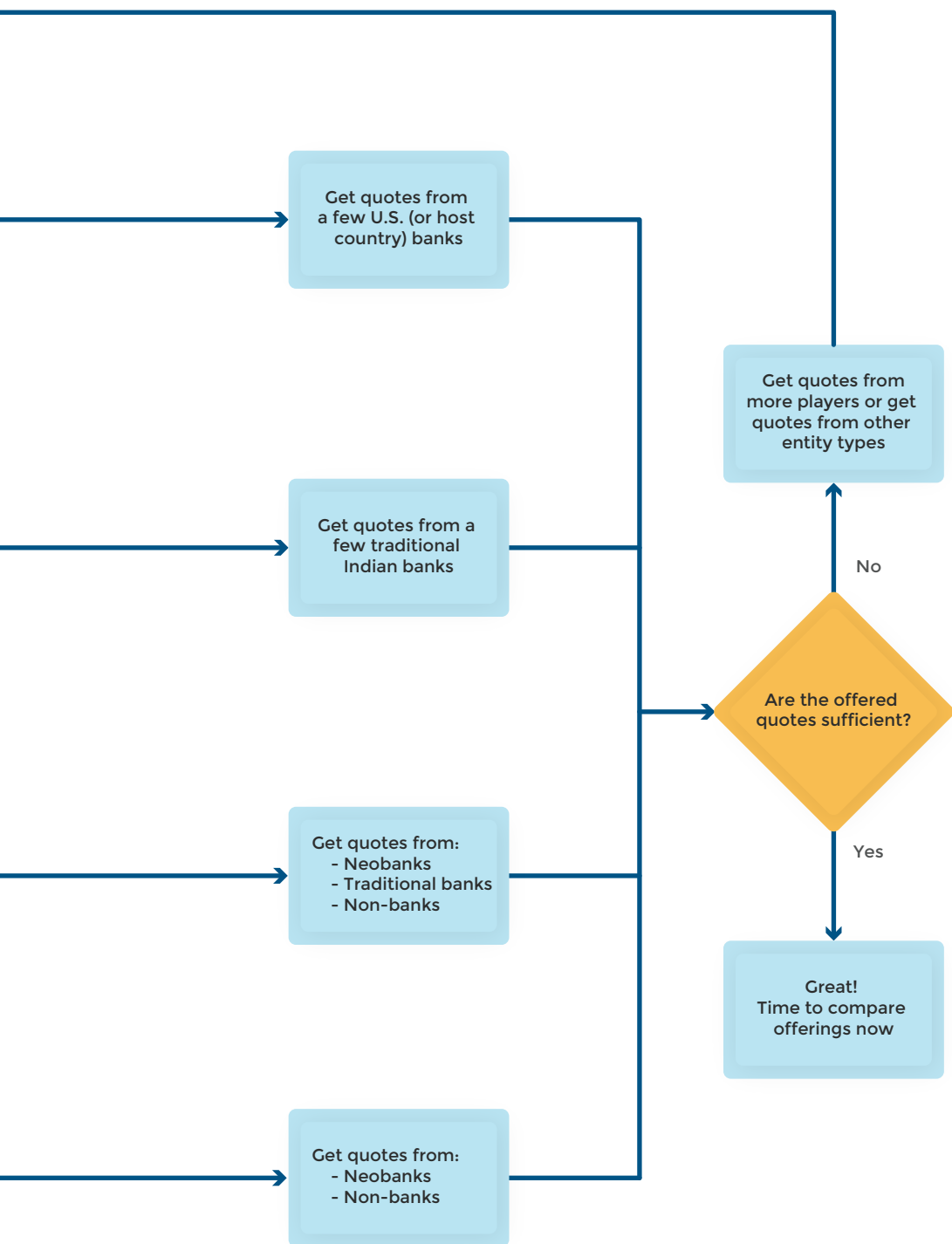
We only mentioned the few non-banks that we’ve heard of. If you don’t get a satisfactory quote from them, explore on your own (and let us know if you find a good solution!).

■ **TIME TO JUXTAPOSE**

So far, you learned a lot about the various options available for you out there. To cap it off, we built a *mental model* in the form of a flowchart that you can use to pick the right options. We also went a step further, and created a table comparing the various options available side-by-side.

We hope you find the next few pages useful!





| Name                                                             | Indian Banks                                         | U.S. Federal Aid               | U.S. Banks            | Neobanks               | Non-banks              |
|------------------------------------------------------------------|------------------------------------------------------|--------------------------------|-----------------------|------------------------|------------------------|
| Application Processing Time                                      | ~ 1 week (private sector). Longer for public sector. | 3 days - 3 weeks               | ~ 1 week              | < 1 week               | < 1 week               |
| Interest Rate (w/o co-signer or collateral or good credit score) | Not Applicable                                       | Low                            | High                  | Medium                 | Low                    |
| Interest Rate (w/ co-signer or collateral or good credit score)  | High                                                 | Not Applicable                 | Medium                | Low                    | Medium                 |
| Co-signer and Collateral                                         | At least one required                                | Not Required                   | At least one required | Typically Not Required | Typically Not Required |
| Credit History                                                   | Highly Relevant                                      | Not Relevant                   | Highly Relevant       | Relevant               | Not Relevant           |
| Loan Tenure                                                      | 7+ years                                             | 10 years                       | 7+ years              | Flexible               | Flexible               |
| Terms of Agreement                                               | Not Flexible                                         | Not Flexible (for good reason) | Not Flexible          | Flexible               | Flexible               |





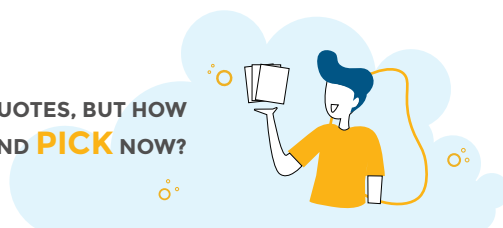
We broke our heads trying to come up with the flowchart and table above because there are *too* many outliers when it comes to lenders. Hence, any form of generalization chips away a lot of valuable information. So, ***please do your own research into each lender before finalizing anything.***

## ■ GETTING QUOTES: DO'S AND DON'TS

As you begin to approach these entities, keep the following in mind:

- ▶ ***Do your due diligence*** before, during, *and* after the process.
  - ▶ Before: Check websites like Quora to read other people's experiences
  - ▶ During: Prepare a list of questions you want answered (to make your job easier, we've added a checklist of questions to ask in the Resources folder)
  - ▶ After: Begin thinking about your repayment plan from day 1 (more on this soon)
- ▶ ***Do bargain.*** The people you talk to will mostly be sales reps who get commissions based on the number of sales. Use that to your advantage and ask for a reduced interest rate, reduced fee, flexible terms, etc.
- ▶ ***Do apply to more than one entity.*** In most cases, getting a quote is free. Once you get from more than one, you can begin to compare offerings.

I'VE GOT A BUNCH OF QUOTES, BUT HOW  
DO I COMPARE AND **PICK** NOW?



Okay great, we're glad you got quotes from a bunch of places! The process you need to follow to pick one is no different than the one you followed to pick your university.



**First**, create a table with the factors you care about. Here are the ones we think you should look at: sanctioned amount, interest rate, annual percentage rate, expected EMI to be paid, processing and disbursement time, fees or penalty, loan tenure, currency of disbursement and repayment, repayment terms, etc.

**Second**, assign priorities. This is very important. If you don't, it will look like each offering is equally good, as it will fare well in a few categories. For example, a neobank might give you a lower interest rate than a private bank, but the sanctioned amount will also be lesser than your need.

**Finally**, don't restrict yourself to picking just *one* option. Remember what we mentioned in the beginning of the chapter? It's better to pick more than one option if it means you get a lower interest rate overall.

Below are some handy tips to keep in mind as you make your choice:

- ▶ **APR >> interest rate.** Some lenders mention a low interest rate but add a lot of charges that end up making your APR much higher than other offerings. Watch out for that.

- ▶ Imagine the worst-case scenario and ask yourself, *will I be able to pay the EMI even then?* Pick the option(s) where the answer is yes. Don't choose a low-tenure loan just to get a low APR, if there's a risk of defaulting on the loan.
- ▶ Keep an eye on the bottom line. Calculate the total amount you would end up paying at the end of the tenure for all offerings. Longer tenure loans usually mean higher total amounts paid, even if interest rates are lower.



Although it might sound like **fixed-rate interest** is better than **variable-rate interest**, studies have found that over time, the borrower is likely to pay less interest overall with a variable-rate loan<sup>[24]</sup>. Again, this is *not* true all the time. Our recommendation would be to go for a variable-rate loan for a short tenure, and a fixed-rate loan for a long tenure (assuming the variable-rate loan has a lower interest rate/APR). This way, you can escape market fluctuations that could impact the interest rate.

In fact, during the 2008 financial crisis, many borrowers who had picked a variable-rate mortgage on their house found that their monthly payments had skyrocketed once the rates began to adjust.

OKAY, I'VE GOT A LOT OF  
**THINKING** TO DO. ANYTHING  
ELSE TO KEEP IN MIND?



Congratulations once again on getting your admit and supporting your dream, financially!

- ▶ As mentioned earlier, **create a repayment plan** on Day 1. Create a good-looking tracker (like the *Dream Tracker*) that you update regularly, and review it every month to see your progress.
- ▶ Look for **refinancing options** in the host country. Given the cutthroat nature of the lending market, most lenders will refinance an existing loan at a lower rate, especially if you build up a strong profile. And guess what? Once you begin your grad school, you'll add a few more feathers to your cap through assistantships and grades.
- ▶ Try to **consolidate your loan** down the line. Lenders tend to offer favorable terms to consolidate given that you're more likely to pay it off once you do that. This goes hand-in-hand with refinancing. Try to do both at the same time if you can.

With that, we've reached the end of helping you secure your loan!



## CONCLUSION

Loans and visas are two topics that people think of as a given, and almost no one dives deeper to understand the nuances. But, we know you're different! And we hope you read this chapter completely. If you didn't, here are some key points to remember: loans are *not* the only way to fund yourself; traditional banks are not the only source of loans; and it is important to follow the do's and don'ts we laid out if you choose to take a loan.

If you've decided to take a loan, fantastic! First, make sure to use the *Loan Estimation* sheet in the *Dream Tracker* to figure out exactly how much you need, then add a 10% buffer on top. We laid out some key terms related to loans in the chapter which will come in handy. One of the biggest factors in taking a loan is your credit score: the higher it is, the better are your terms.

There are four kinds of entities that lend money: traditional Indian banks, traditional U.S. banks, Neobanks, and Non-banks. A neobank is a new type of bank that is 100% digital, sometimes mobile-only. Non-bank lenders are

typically fintech companies who are primarily focused on lending, but also offer other useful features like scholarships and U.S. bank accounts. You can use the flowchart we created to figure out suitable options and then use the table to compare them further.

When getting a quote, do your due diligence, try to bargain, and do apply to more than one lender. Once you get quotes, use the method you followed to rank your universities once again. Create a repayment plan on day 1, keep looking for refinancing options, and if you take multiple loans, see if you can get a better rate by consolidating them. Congratulations once again on getting your admit and working to fulfill your dream financially!

## A LITTLE REFLECTION

- ▶ Did you estimate the amount needed? Was it less or more than your expectation?
- ▶ Did you know about neobanks before reading this chapter? Were they more advantageous than a traditional bank?
- ▶ What was something that surprised you while looking into the various entities? Is it worth sharing with the wider community?



# Chapter 16

## GETTING YOUR VISA

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Time to prep and ace  
one final interview

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## DORMANCY ENDS

I remember a period of dormancy in the months of May and June, after picking Columbia University and packing my bags from NIT Trichy<sup>[1]</sup>. This dormancy ended when I had to begin preparing for my visa interview. Like any diligent student, I combed through dozens of questions and answers on Facebook groups and student forums, practiced speaking in front of the mirror, and hoped for the best.



Most of my memories from that summer are hazy, but I remember sitting in an auto rickshaw on my way to the U.S. consulate and thinking *Oh no! I forgot to take my transcripts*. I had a neat checklist and everything. Yet, I somehow missed a critical component. I made my father travel all the way and give it to me before my interview began. In the end, they did not ask me for it (nor did they ask for most of the documents I carried with me).

Still, I was right to be scared. And, you're right to be scared now if your interview is a few days away. Some students *do* get rejected, and that is devastating. All the work you did until now might seem obsolete if this doesn't go well.

However, you need to understand that this is not like the H-1B lottery where the odds of getting selected are out of your control. There are clearly laid out guidelines when it comes to visa interviews, and as long as you are aware of them and abide by them, there is no reason you won't get your visa. We'll go through all of them in this chapter and ensure you're well prepared to inch closer to your dream. You've got this!





Great question! A visa is a *promise* of intended activity by a foreign national upon a host nation's soil. It is an official document that is usually stamped or glued onto the foreign national's passport. A visa is strictly defined to make sure that you, as a visitor, remain in the host country *only* for as long as the specified intention/situation holds.

For example, the visa-category B1/B2 is a visitor's visa offered to non-U.S. citizens who seek to enter the country temporarily either for business (B1), tourism (B2) or both (B1/B2)<sup>[2]</sup>.

For the most part, the United States offers two main categories of visas defined by immigration law<sup>[3]</sup>:

- ▶ **Immigrant Visas:** Offered to foreign nationals who seek to live permanently in the U.S. Examples include IR1, CR1, EB1, EB2, etc.
- ▶ **Nonimmigrant Visas:** Offered to foreign nationals who wish to enter the U.S. on a temporary basis—for tourism, medical treatment, business, temporary work, study, or other similar reasons. Examples include F1, B1/B2, M1, H1B, O1, etc.



Family based immigration accounts for 65% of all the immigrant visas issued each year<sup>[4]</sup>. Second to that are the Employment-Based Immigrant Visas (EB category). Every year, the U.S. immigration law has provisions that make approximately **140,000 employment-based immigrant visas** available to qualified applicants<sup>[5]</sup>. This type of visa is usually given to foreign

nationals who seek to immigrate based on their job skills (note: Melania Trump entered the U.S. on an EB1 Einstein Visa<sup>[6]</sup>).

Now, let's shift our focus to the non-immigrant visas as that is the means through which you can enter the U.S. to pursue your higher education.



This chapter was primarily written for international students planning to pursue their studies in the **U.S. on an F1 visa**. If you don't belong to that archetype, please use other guides that are tailored for your situation.



## ALL ABOUT THAT F1

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The F1 student visa is a *nonimmigrant* visa.

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It is offered to foreign nationals who wish to enter the U.S. as students to attend their dream universities. You are eligible to obtain this visa *only* if you are enrolled in a program or course of study from a U.S. accredited university that ultimately awards a degree, diploma, or a certificate upon successful completion. It is generally provided for up to five years, however it is valid only until 60 days *after* the end of your academic program (assuming you don't apply for an OPT, which we'll come to soon)<sup>[7]</sup>.

In your first academic year on an F1 visa, you are allowed to work on-campus, but you *cannot* work off-campus. However, after the first academic year, you may seek three types of off-campus employment opportunities as laid out below.

## CURRICULAR PRACTICAL TRAINING (CPT)

CPT is an integral part of your program of study. It adds relevant work experience to your arsenal *and* gives you course credit. To be eligible for CPT, you need to speak to your Designated School Official (DSO) to understand your school's policy. Generally, you need to:

- ▶ Have completed one academic year as a full-time student in a SEVIS-approved college
- ▶ Have a letter from your employer for either a full-time or part-time position related to your major

Upon completion of the requirements set by your school, you will get a new I-20 showing proof of approval to begin your CPT.



**I-20** is a form provided to you by your university's **International Students & Scholars Office (ISSO)** that provides supporting information on your visa status. It also has a ridiculously long alias: *Certificate of Eligibility for Nonimmigrant (F1) Student Status-For Academic and Language Students*.

## OPTIONAL PRACTICAL TRAINING (OPT)

OPT is offered to students either during (pre-completion OPT), or after (post-completion OPT), the completion of the program. Similar to CPT, you must obtain approval from your DSO, get your new I-20, and then apply for something called an Employment Authorization Document (EAD) from the USCIS. However, *unlike* the CPT, you don't obtain a course credit on an OPT<sup>[8]</sup>.



On pre-completion OPT, you can work for *up to* 20 hours a week since your program is still in session. On post-completion OPT,

it's the opposite. You have to work *at least* 20 hours a week in a field that is directly related to your field of study.

### STEM OPT EXTENSION

If you remember, in Chapter 3, we introduced something called a STEM OPT extension. Let's recap once more: if you are an F1 student earning a degree in Science, Technology, Engineering, or Mathematics (STEM), you may be eligible for a **24-month extension** to your employment authorization in the U.S. You can find a list of all STEM verified majors on Immigration and Customs Enforcement's website<sup>[9]</sup>.



If you're wondering why someone would apply for a STEM OPT Extension, here's why:

- ▶ In most cases, it's to give themselves more time to have another shot at the H1B lottery (remember, it's a lottery system!)
- ▶ To further gain valuable practical training to eventually apply for another nonimmigrant visa such as the O1 (that does not involve a lottery)
- ▶ To further gain valuable practical training before returning to their home country



### BOOKING YOUR INTERVIEW

Alright, that's enough information on your visa. Let's dive into your interview now. By now, you must have gotten the I-20 from your university. If you haven't, please contact your university's ISSO to get it as soon as

possible. Without it, *you cannot proceed forward*.

Before you book your visa appointment, make sure you complete the following<sup>[10]</sup>:

- ▶ Confirm your enrollment at the university
- ▶ Acquire your I-20
- ▶ Complete the online visa application, a.k.a, form DS-160
- ▶ Pay the **non-refundable** visa application fee and SEVIS I-901 fee



Here are a few edge cases to watch out for:

**Acquiring multiple I-20s:** It's okay to have multiple I-20s. However, while completing your visa application form (DS-160), you should only mention the details of the university you've chosen to attend. If you change your university *after* receiving your visa, you have to redo the entire application (please avoid this!).

**Wrong information on I-20:** It happens. If there is an error on your I-20, request for correction from the university's ISSO as soon as possible. You need the corrected version for your visa appointment.

**Changing visa appointments:** After scheduling an appointment, you will receive a confirmation email indicating a date and time until when you can make changes to the appointment. No changes are allowed post that.

Assuming you're all good to go, let's get into what you need to take with you.

## PREPARING YOUR DOCUMENTS

Getting your visa is a two-step process:

- ▶ **First**, you need to go for your biometrics appointment at the Visa Application Center (VAC)
- ▶ **Second**, you need to give your much-anticipated visa interview in the U.S. Consulate

### REQUIRED DOCUMENTS

Below are the documents needed throughout the process<sup>[11]</sup>:

- ☐ Current *and* old passports, if any
- ☐ Form DS-160 confirmation page
- ☐ A copy of your visa appointment letter
- ☐ At least one photograph conforming to the stated requirements<sup>[12]</sup>
- ☐ Payment receipt of the SEVIS I-901 fee
- ☐ Form I-20
- ☐ Letter of admission provided by your school
- ☐ All of your academic documents
  - ☐ Transcripts, diplomas, degrees, or certificates from schools you have attended
  - ☐ Standardized test scores required by your U.S. school



We specified the documents based on information available at the time of writing the book. We cannot stress this enough: *please check the official website to get the most up-to-date, accurate list.*

Along with the above, you are also required to take additional supporting documents. But, before we get into that, let's first try to get into the minds of your interviewer.

## KNOW YOUR CUSTOMER

There is an important term in banking called *Know Your Customer (KYC)*. It refers to the steps taken by a financial entity to establish the identity of the customer, verify that their funds are legitimate, and assess them for risk of money-laundering in the future<sup>[13]</sup>. Without going through a thorough KYC process, the bank might expose itself to possible fines and reputational damage in the future.

Similarly, when it comes to visa interviews, the consulate goes through a KYC process where they screen you for a few things. Read what the USCIS has stated on its website under student visas:

“ You may enter in the F-1 or M-1 visa category provided you meet the following criteria:

- ▶ You must be enrolled in an "academic" educational program, a language-training program, or a vocational program
- ▶ Your school must be approved by the Student and Exchange Visitors Program, Immigration & Customs Enforcement
- ▶ You must be enrolled as a full-time student at the institution
- ▶ You must be proficient in English or be enrolled in courses leading to English proficiency
- ▶ **You must have sufficient funds available for self-support during the entire proposed course of study**
- ▶ **You must maintain a residence abroad which you have no intention of giving up.** ”

We highlighted the last two points to show their importance. The two main questions that your interviewer looks to answer in your interview are<sup>[14]</sup>:

- ▶ *Do you have sufficient funds available to support yourself throughout your course of study?*
- ▶ *Are you going to the U.S. (or another country) with the intent of studying and returning back to your home country?*

---

If the answer to either of those questions is *no*,  
your visa will *not* be issued.

---



The two most common reasons for a visa denial are insufficient funds and indication of immigrant intent. **Pay extra attention to the upcoming sections to ensure you present sufficient proof.**

## **\$** INSUFFICIENT FUNDS

If you don't show sufficient funds for at least the first 12 months of your studies, along with indications on how the rest of your studies will be funded, they will most likely reject your visa.

### HOW TO AVOID

First and foremost, your funds *must* be in the form of liquid assets: either cash or something that can be converted into cash immediately. This is what Ilono Bray, an award-winning author and legal editor at Nolo, says<sup>[15]</sup>:



*Your sources of financial support can include personal funds; personal assets or pieces of property that are readily convertible to*



*cash; pay from work that you do as part of a fellowship or scholarship; or specified funds from other persons or organizations.* ”

Breaking that down into more detail, you need to show evidence of one or more of the following:

- ☐ Personal or family funds, which can be one or more of the following: pay slips, tax returns going back up to 3 years, bank statements and passbooks, etc.
- ☐ Asset(s) held by you or your family member that can immediately be converted into cash. A good example here is real estate. If you or your family own real estate, be sure to include documentation on that *along* with documents on the amount left to be paid, if there is a mortgage or loan taken on it.
- ☐ Scholarships, fellowships, assistantships, grants, or loans from your university, government, or private sources.
- ☐ Employment status of family members who will be supporting you, in the form of a company letterhead or copies of income tax statements.
- ☐ Form I-134, or an *Affidavit of Support*, if you are being sponsored by a U.S. citizen or someone holding a green card<sup>[16]</sup>.



Note that if there is an unusually large amount of recent deposit in your bank account, it will raise their suspicion that it was borrowed from a friend or relative for the sake of the interview. To avoid that, attach an official document or something in writing, explaining the source of the fund.

## IMMIGRANT INTENT

If you come across as someone who has immigrant intent, i.e., someone who wants to settle down in the U.S. (or a foreign country), they will most likely reject your visa.

### HOW TO AVOID

By default, the consular officer *will* assume that your intent is to settle down abroad. The burden of proof is on you to display nonimmigrant intent, i.e., to prove that your visit is temporary in nature. Boston University's ISSO says<sup>[17]</sup>,

*“ The way you can try to prove your non-immigrant intent is by giving the Consular officer documents that indicate that you have strong ties to your country. The stronger your financial, employment or family ties to your country, the more likely it is that the Consular officer will believe that you intend to return home. ”*

Breaking down that into more detail, you need to show evidence of one or more of the following:

- ☐ Financial ties in the form of property owned or investments made in the home country. Note that you cannot show the same documents that you used to show sufficient funds.
- ☐ Employment ties in the form of a letter from your current or prospective employer stating that you will join after your studies.
- ☐ Familial ties in the form of documents proving your relationship to your family along with their proof of residence.
- ☐ Immigration history showing that you have travelled abroad before, and returned back to your home country.

The above might sound like overkill, and in many cases simply stating that

you plan to return back to India might be enough. However, given that this is one of the top reasons a visa gets rejected, we strongly recommend being safe rather than sorry.



Showing the above becomes more critical if one or more of the following is true: one or more members of your family live in the U.S. or are permanent residents, your financial sponsor lives in the U.S., you are married and applying for an F2 visa for your spouse or children, this is your first trip to the U.S., or you have been denied a U.S. visa before.

Aside from those two, here are a few more reasons for denial<sup>[18]</sup>:

#### **LATE APPLICATION**

If you apply for your visa after the specified program start date on your I-20, they might reject your visa. To avoid this, ensure that you apply for your visa at least eight weeks before your program's start date.

#### **LACKING ENGLISH PROFICIENCY**

Finally, if your english proficiency seems inadequate, they might reject your visa. If you don't feel satisfied with your current proficiency, revisit the official and unofficial resources for *listening* and *speaking* that we mentioned in Chapter 5, when you were preparing for your competitive exams.



#### **PREPARING FOR THE INTERVIEW**

In the table below, you will find some of the most commonly asked questions, along with what we feel the interviewer's intent is and the approach you should follow to answer them.

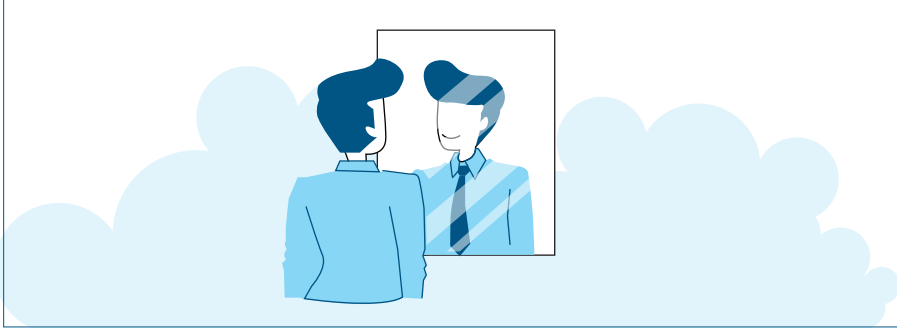
| Question                                                                                              | Interviewer's Mind                                                                           | Approach                                                                                                                        |
|-------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Why have you chosen this university?                                                                  | <i>Do you have a good reason for choosing this university?</i>                               | Talk about your school's reputation, course relevance, professor/alumni reputation, research facility, location                 |
| What are your plans after you graduate?                                                               | <i>Do you have immigrant intent?<br/>Are you planning to immigrate and work in the U.S.?</i> | Mention companies you want to join in India, offers (if any), research plans, <b>and</b> strong family ties                     |
| Why not get a job in the U.S. after you graduate?<br>If offered a job in the U.S., what would you do? |                                                                                              | Mention you will return due to opportunities in India, offers (if any), strong family ties, financial ties (assets/real estate) |
| Do you have relatives in the U.S.? How long have they been there?                                     |                                                                                              | Be honest, but mention only immediate family                                                                                    |
| Have you been to the United States before? When and why?                                              |                                                                                              | Mention previous visits, <i>if</i> any. Don't overshare                                                                         |

| Question                                                         | Interviewer's Mind                                                                              | Approach                                                                                                                     |
|------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| How do you intend to financially support your education?         | <i>Do you have sufficient funds to handle your tuition + living expenses?</i>                   | Mention sponsors, scholarships, loans, liquid assets; Show documents for as many as you can                                  |
| What will you do if you run out of money?                        |                                                                                                 | Mention clearly that it would <b>not</b> happen and you have sufficient funds. Don't say your relatives or friends will help |
| Do you plan to work while you study?                             |                                                                                                 | Mention you might apply for TA/RA positions but are not interested in non-academic opportunities                             |
| Why is your GRE verbal score low? [assuming you've mentioned it] | <i>Can you survive with your current language proficiency?</i>                                  | Have a good reason: academic focus, project focus, etc. Be honest and speak fluently                                         |
| Why the U.S.?                                                    | <i>What made you choose the U.S. over other countries? How much do you know about the U.S.?</i> | Talk about quality of infrastructure, research facilities, diversity, professors/mentors, etc                                |
| Considering the current economy, why the U.S.?                   |                                                                                                 | Mention you <b>don't</b> plan to work there and hence it does not matter/affect you                                          |



## D-DAY

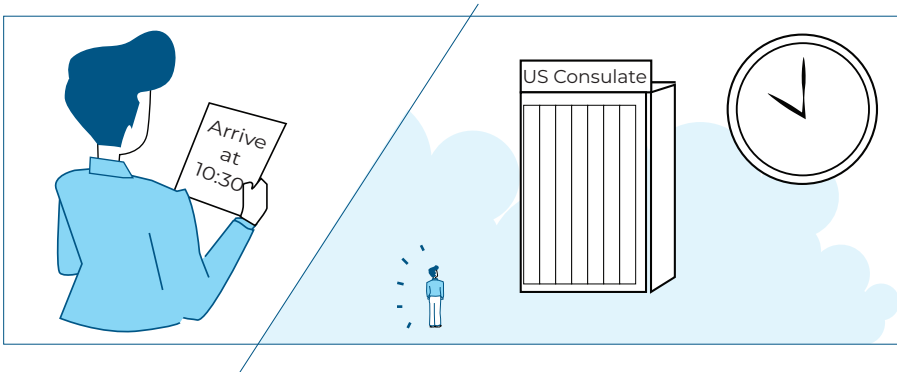
WEAR FORMAL ATTIRE AND A CONFIDENT SMILE



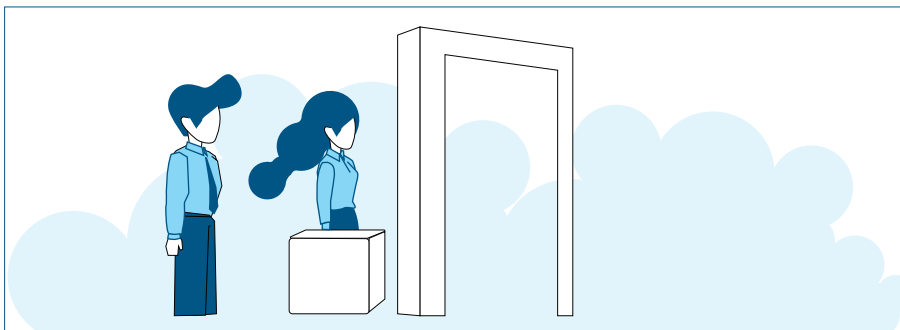
CHECK AND RE-CHECK THE DOCUMENTS REQUIRED



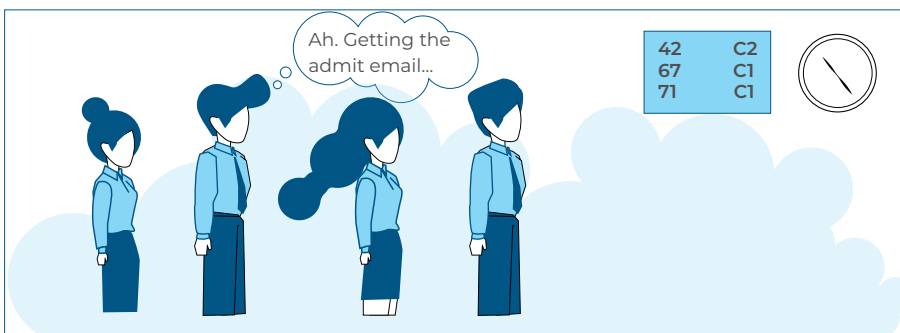
REACH THE VENUE AT LEAST 30 MINUTES BEFORE YOUR APPOINTMENT



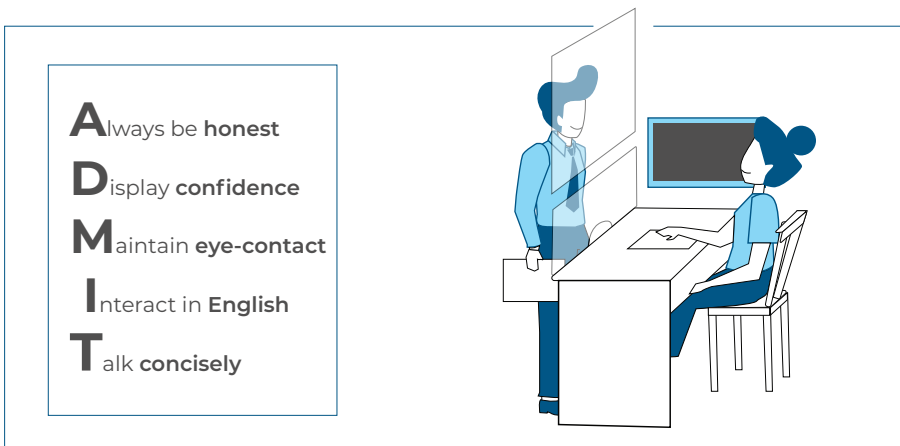
**DON'T TAKE PROHIBITED ITEMS (PHONE, ELECTRONICS, FOOD)  
INTO THE CONSULATE**



**GO OVER THE Q&A'S IN YOUR HEAD AND THINK OF A HAPPY MEMORY**



**FOLLOW THE A.D.M.I.T. PROCESS**





## AFTER YOUR INTERVIEW

Alright, you did it! You checked off another critical component in your journey to study abroad.

If your visa was approved, fantastic. We hope this chapter helped you in that process. You just need to wait for your passport to arrive or go pick it up yourself, depending on the option you chose.

However, if your visa was rejected, then *it's okay!* It happens more than you think. In fact, the worldwide rejection rate for an F1 visa is 33.4%<sup>[19]</sup>, in no way a trivial number. As mentioned earlier, this is *not* a lottery. If they deny you your visa, they will have to clearly state the reason for doing so, and you can act on it.

### DENIALS AND MITIGATION

In the table below, we've mentioned the various reasons for denial along with some next steps to take<sup>[20]</sup>. Please keep in mind that we are *not* attorneys and this should not be considered legal advice.

| Reason for Denial                       | Context                                                                                                                            | Next Steps                                                                                              |
|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| 214(b)<br>Immigrant<br>Intent           | You did not sufficiently prove that you have nonimmigrant intent                                                                   | This is a temporary ineligibility and you should gather more evidence as stated earlier and apply again |
| 212(a)(4)<br>Public Charge              | You did not sufficiently prove that you have the funds required to support yourself, and will become a public charge in the future | This is a temporary ineligibility and you should gather more evidence as stated earlier and apply again |
| 221(g)<br>Incomplete<br>Application     | You did not provide all the documents required and requested for                                                                   | Provide the requested additional information as soon as possible                                        |
| 212(a)(9)(B)(i)<br>Unlawful<br>Presence | You had previously entered the U.S. and illegally stayed beyond your visa expiration date                                          | This is a temporary ineligibility depending on your previous misconduct and you should contact a lawyer |



|                                                   |                                                                     |                                                                                              |
|---------------------------------------------------|---------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| 212(a)(6)(C)(i)<br>Fraud and<br>Misrepresentation | You had willfully misrepresented a material fact or committed fraud | This is a permanent ineligibility (unlike all reasons above) and you should contact a lawyer |
|---------------------------------------------------|---------------------------------------------------------------------|----------------------------------------------------------------------------------------------|



We have witnessed cases before where students approached education consulting firms to assist them with a complex case, only to receive bad advice and make the situation worse. If your current situation seems complex, please reach out to a lawyer right away!



Just one final point. Until now, if you’ve been following the book closely, you know the theme *anticipate difficulty and prepare early* well. The topic of visas is no exception.

Now that you’ve (hopefully) gotten your F1 visa, begin exploring the other categories out there, aside from the H1B. When you enter the U.S., or any foreign country, you should not enter with the intent of becoming an immigrant. However, that should not stop you from understanding the requirements to eventually get there, and aligning your career accordingly.

Hear what Saiman Shetty, an *EB1A Einstein Visa* recipient who pursued his master’s in the U.S.<sup>[21]</sup>, has to say:

“ In my opinion, the U.S. has always been open to people who demonstrate extraordinary abilities in their own fields. The

*O1A and EB1A visas allow for that. There is a high bar of excellence to qualify for them, rightfully so. However, I believe that consistent original contributions in your field, publishing papers, obtaining patents, being a part of elite associations, getting featured in the press, and earning the admiration of already established people in your field will make you stand a good chance. Adopt a well-defined, personalized strategy from the beginning. ”*

So, anticipate difficulty but start *early*!



## CONCLUSION

Are you nervous about your upcoming interview? You should be. However, know that if you follow the guidelines we laid out in this chapter, take all the required documents, and answer the questions confidently, there's no reason why you won't walk away with an approval! First, know that a visa is a *promise* of intended activity by a foreign national upon a host nation's soil. It is to make sure you, as a visitor, remain in the country *only* for as long as specified. Visas are of two types: immigrant and nonimmigrant. The visa that we focused on in this chapter is the F1 nonimmigrant visa. On an F1 visa, you can study in the U.S., work on-campus, and after one academic year, work off-campus through CPT and OPT. If you are pursuing a STEM major, you can get a 24 month STEM OPT extension.

Once you get your I-20 from your university, go ahead and book your interview and prepare the documents required. We've provided a list, but make sure you check the official website to get the latest version. It is a two-step process to get your visa: first, they take your biometrics and then there's the interview. They screen for certain things during the interview, so make sure you understand them and especially provide sufficient proof to

show nonimmigrant intent and financial stability. Use the table we gave (and other resources) to practice the answers a few times.

If you get your visa on the first try, that's fantastic! However, if your application is rejected, don't worry, it's *not* the end. The interviewer *will* tell you the reason, so you can act on it for future applications. Once you've obtained your F1 visa, also begin exploring the other categories out there, such as EB1 and O1, for the future. Finally, remember A.D.M.I.T. and we hope you get ADMIT-ted into the country of your choice!

### A LITTLE REFLECTION

- ▶ Do you have a sense of what you want to do after graduating from the university abroad?
- ▶ What is your plan if you run out of money abroad? Have you applied for scholarships or assistantships? Can someone sponsor you?
- ▶ Did your visa get rejected? What could you have done to prevent it? How do you plan to mitigate it now?



# Chapter 17

## LINKEDIN, NETWORKING, AND E-LEARNING

Time to create the best version  
of yourself, online



Life is on overdrive when you are in graduate school.



During my first two semesters, I lived in the basement of an apartment, sharing a room with another girl. I would wake up at 10:15 AM to tiny rays of sunlight coming in through a tiny window, get ready in a matter of minutes, and be out of the door by 10:30. As I rushed to the campus for the 10:40 AM class, I'd check my email and messages to see if I got any interview calls. The class would go on until 12:15 PM, after which I'd pick between the three inexpensive places where I always bought my lunch, and take it to the business school library. The afternoons were consumed either by assignments or meetings. Occasionally I would meet someone I know who would stop by to say hi.

By 4 PM, I'd rush again to another class and sit there for the next two hours. On many days, there would be an event happening in the evening. If it was a networking event, I'd quickly change into better clothes I had stuffed in my bag and attend it in the hope that someone there will give me an opportunity. After a tiring hour or two of standing and talking, I'd retire to another building that was open 24x7, to meet my friends. I would continue working on my assignments or hunt for jobs, depending on my mood, until we all decided to go buy dinner around 10 PM from a nearby deli. After a questionably long dinner filled with chit-chat, I'd return to the building, move my things to a different room, and work there until 4 AM before finally deciding to go back home and crash onto my not-so-sturdy bed.

This wasn't everyday, of course. Sometimes, I would listen to a podcast and take a walk around the campus. Sometimes, my friends and I would go to the

edge of the Hudson River and stare at the breathtaking Brooklyn skyline. Once in two weeks, I had to suit up and sit through a five hour lecture on consulting taught by a renowned professor<sup>[1]</sup> that went from 7 PM to 12 AM (sometimes longer). It was five hours well spent.

However, when I think about my experience, this seems like a good approximation of the average day.

## CALM AMIDST THE STORM

On a daily basis, you will be shuttling between classes, meetings, assignments, events, and searching for jobs. Not to mention any research you need to conduct if your major entails that. That isn't a recipe for a calm day.

---

You *will* need to learn to infuse some order into the chaos and find pockets of peace to engage in deep work whenever possible.

---

The good news is, there are *many* things you can do to prepare yourself for what is to come before it *actually* comes. Now that you've gotten your admit and hopefully taken care of your loan and visa, use this downtime to make your future self's life easier.

In this chapter, we'll look at three verticals where you can begin your preparation from *now*.

## BEEF UP YOUR ONLINE PROFILE

The string of emails from your university will start flowing in soon after getting your admit. Among these emails, pay close attention to the ones with resources to write your resume and set up your profile on professional networking sites. In an increasingly digital world, there is a much higher probability for recruiters to see your profile online before seeing you in person.

---

Ensure that the first impression you give someone online is the best version of yourself.

---

We already went through how you can craft your resume in Chapter 6, so let's look at how you can beef up your online profile on professional networking sites and job boards<sup>[2]</sup>.

## LINKEDIN

Unlike its competitors, LinkedIn serves as both a professional networking site *and* a job board.



LinkedIn had a very humble beginning back in 2003<sup>[3]</sup>, when it was conceived in the living room of Reid Hoffman. It received a sizable investment of \$4.3 million from Sequoia Capital, which helped it launch its premium services in 2006, aimed at job seekers. Since then, it has seen an upward growth trajectory, becoming one of the top professional networking sites in the world (although lately, it has also become a social networking site).

It was acquired by Microsoft in 2016 for \$26.2 billion, the biggest acquisition by the software giant till date. As of 2020, **LinkedIn boasts a user base of 660 million users across 200 countries, with the U.S. and India being its top two markets.** More importantly, 90 million of the users on LinkedIn are senior-level influencers.

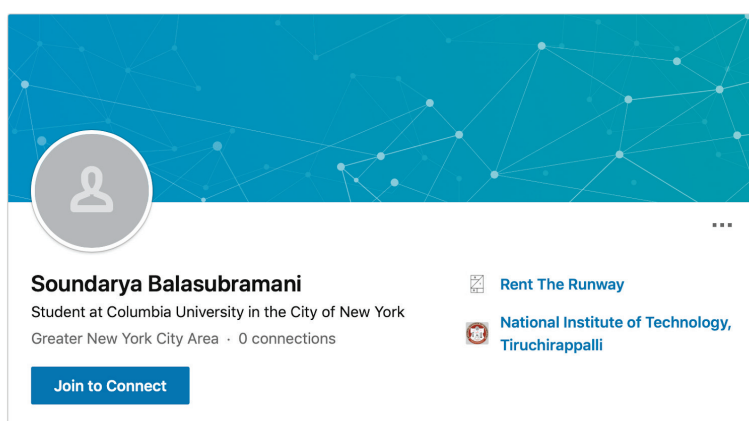
We say all this to drive home the importance of having your profile visible on such a massive platform. Since creating a profile is free, we highly recommend creating one *now* when you have the time to customize it to your liking. It will always be a work in progress to keep your profile updated, but the right time



to start doing that is *right now*.



No worries, we've been there. Generally, if you haven't been using LinkedIn much until now, your profile would look something like the following<sup>[4]</sup>:



That was a dummy profile I created back in 2018 to portray what *not to do*, in my first YouTube video<sup>[5]</sup>. In fact, you can still find it, since I forgot the password and cannot login to delete it.

On the other hand, if you're hearing the term LinkedIn for the first time, begin by signing up on the website first. Once you've got a profile set up, follow the guidance provided below closely to create a stellar profile.

Beginning with the basics, the following fields are an absolute must on your profile:

1. **Profile Picture:** Avoid the extremes here. Don't upload a picture of you taking a selfie. Also, don't upload your passport picture from three

years ago that looks nothing like you. You have to stick to the middle: a semi-professional picture that shows your face clearly with preferably a single-colored background.

Your university will most probably schedule a headshot during your orientation. Until then, settle for something that's formal and recent.

2. **Title:** Take some time to craft this. This is what someone sees first when you reach out. The following are some examples you can choose to include:

- ▶ Graduate school (e.g. Incoming Student at Duke University)
- ▶ Area of interest (e.g. Machine Learning, Big Data Analytics, Linguistics)
- ▶ Job title if you're employed (e.g. Product Manager, Data Analyst)
- ▶ Distinguishable awards (e.g. WTM Scholar, Cargill Scholar)
- ▶ Titles held in clubs/organizations (e.g. Marketing Manager at TechFest, Founder of 3D Aeromodelling)

Try not to add more than three different types of designation to the title.

3. **Summary:** There are two kinds of people in this world: those who write one line summaries and those who write one page summaries.

LinkedIn lets you write up to 2000 characters in your summary (or roughly 350-400 words)<sup>[6]</sup>. As someone who likes the gray area, my recommendation would be to be somewhere in the middle and write between 200-300 words. Your summary is the part of your profile that is least constrained. There are no dates and titles to be mentioned. Your summary is just a blank, white canvas that you get to paint as you wish.

If you see the examples online, you would see them being all over the place. Some use it as a way to talk about a major life transition<sup>[7]</sup>, some

preach their professional and personal values<sup>[8]</sup>, yet others talk about their major accomplishments<sup>[9]</sup>.

---

The only common thread here is that there is none, because your summary is supposed to bring out *your* character.

---

If you were meeting someone in person in a professional setting, what would you want them to know about you if they only had three minutes to listen to you? The answer to that should become your LinkedIn summary.

4. **Experience:** Your experience is what recruiters, and others in general, would most care about. Chronologically, begin adding all of your professional experiences, such as your current or previous job(s), internship(s), and professional titles held in organizations, if any.

For each experience, add the title, university/company/organization, duration, and location without fail. If the entity is not well known, use the first sentence to introduce it (e.g. NIT Trichy is one among the top 10 engineering universities in India and is recognized as an institute of national importance by the Indian government). It also helps to give some context on the project you worked on, in a sentence or two.

Treat this section similar to your resume. Under each experience, use no more than three to four bullet points to succinctly explain the impact you created using quantitative data and a tight narrative.

---

Although there isn't a cap on the number of words,  
less is always better.

---

5. **Education:** Similar to the *Experience* section, add your university name, degree, major, and CGPA (if you feel comfortable) without fail. If

you got involved in extracurriculars, this is a great place to mention that, under *Activities and Societies*.

6. **Skills:** Your skills show others what you are capable of in one glance. A report<sup>[10]</sup> from LinkedIn says that *“Depending on what stage you are in your career, you should try to add at least 5 skills. Members with 5 or more skills listed are contacted (messed) up to 33x more by recruiters and other LinkedIn members, and receive up to 17x more profile views.”*

A great place to begin is by looking through the courses you’ve taken, to extract the topics that were taught. You can also take inspiration from articles that talk about the top skills being searched for<sup>[11]</sup>.



To be clear though, merely adding a skill does *not* turn heads. There are two ways by which LinkedIn lets you add validation to the skills you’ve listed: **endorsements** and **badges**.

For every skill you add, anyone on LinkedIn can **endorse** you for it by going to your profile, selecting the plus symbol next to your skill, and answering questions around how they knew about it.

**Badges**, on the other hand, are a more recent feature on LinkedIn that got rolled out in September, 2019<sup>[12]</sup>. This feature lets you take assessment quizzes for a specific set of skills. You can see the button right below your *Skills* section with the words *Take skill quiz*. You need to be above the 70th percentile to pass, after which you can choose to add the badge to your profile.

That is why it is better to be sparing in the skills you add, and improve its quality by reaching out to your friends and colleagues who can endorse you<sup>[13]</sup>, and taking the quizzes.



You absolutely should, given that you're starting early and have the time. LinkedIn will show you recommendations for jobs and people based on the content in your profile.

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The more fields you include → the more keywords your profile has → the more data points LinkedIn can use for better recommendations.

---

Let's look at the rest of the fields:

**7. Cover Picture:** We talked about your profile picture before. LinkedIn also lets you upload a *cover* image or banner that extends across the top of your profile. Depending on your situation, this landscape picture can be the following:

- ▶ An event where you were a speaker / panelist / judge / an emcee
- ▶ A good shot of your graduate school, perhaps a recognizable monument
- ▶ An image capturing your interests, e.g. a mathematician can have an image with an important theorem/proof
- ▶ A quote
- ▶ Anything that sparks a viewer's curiosity in a good way

**8. Recommendations:** You might think, *why go to the trouble to add recommendations when I've already spoken about my amazing experiences and skills?*

The answer is the same as the reason your university wanted to hear about you from your professors and managers despite a comprehensive application from you. I know the author of a book will think her book is the best one written in the history of print. However, if I hear that from ten others who have no strings attached to her, I'll start to take notice.

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We like to know what people around us think of something.  
Or in this case, someone.

---

Similar to your letter of recommendation, get it from people who can vouch for you strongly and talk about personal anecdotes. However, unlike the letter of recommendation, you don't need to restrict this to your professors or managers. Even seniors and project partners you worked with can recommend you, although the impact of it might not be the same.

**9. Accomplishments:** This section houses a lot of different topics: awards, courses, projects, publications, scores, and more. We know that sounds exhausting, but think about it this way. The more fields you populate, the more time someone will spend on your profile. The more time they spend, the more reason you are giving them to talk to you.

I remember during my first semester at Columbia, a senior from my major walked up to me and said, *'I saw you have [number] awards listed on your LinkedIn profile. That's very impressive!'* You don't know whose eyes will land upon your profile in the future. For now, play your favorite tune in the background and get to filling this section.

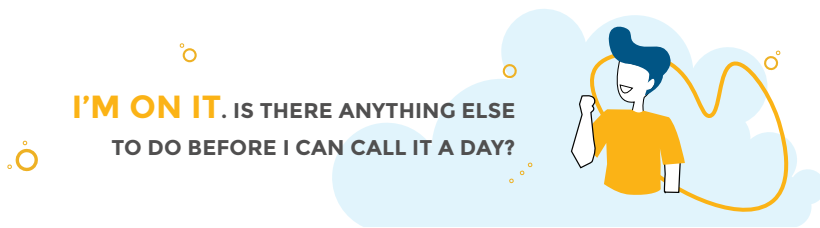
**10. Licenses & Certifications:** This is where you get to add all the glorious Coursera and other certifications you've received. Adding a license or a certification is the highest form of attestation to your ability. If you also took the time to complete a certification course on, say, Project Management (PMP) or Salesforce, pile them on here!

11. **Volunteer Experiences:** Finally, we end with one of the most *underrated* sections in the LinkedIn profile: talking about our service to the community. We've noticed from personal experience that volunteering is prevalent at many companies, specifically in the domain of information technology. Salesforce, for example, gives the opportunity for its employees to volunteer for 56 hours every year (all paid)<sup>[14]</sup>.

Hence, adding your past volunteering experiences will greatly boost your image when recruiters from such companies look at it.

Most people who view your profile probably won't read half of these fields, but the ones who do will walk away with a deep sense of appreciation for you for putting in all the hard work.

We hope you give them a reason to feel that way.



Just a few more pointers to keep in mind.



First, go to the top of your profile and click on the *Add profile* section button. You will see a category named **Featured** under it. The *Featured* section differs from the *Activity* section in that it gives you control of what you want to show your visitors. If you have a website, or an article written by you or about you in an external site, or a video you wish to upload with something you did, *this* is the place for it. Keep updating this section as you climb your career ladder.

Second, use the **Hashtag** feature in LinkedIn to follow the topics that matter most to you, so your home feed is filled with rich information<sup>[15]</sup>. You can begin by searching for a few topics in your search bar prefaced by the # symbol, and following those topics. Once you've added a few, you can discover more by navigating to your home page and selecting the *Discover more* option on the bottom left<sup>[16]</sup>. Apart from getting hashtag recommendations, you can also use it to follow people, pages, and groups.

Finally, LinkedIn lets you customize your public profile URL, which is useful as you will attach your URL in various spaces including resume and email signatures. If your current URL is too long or contains numbers, go to your profile and click on the **Edit public profile & URL** button on the top right corner<sup>[17]</sup>. Since two people cannot have the same public URL, this is a first come first serve feature. Edit the URL to your liking, and go over your entire profile once, to make sure you've put your best foot forward online.

## JOB BOARDS

Unlike LinkedIn, job boards have a singular purpose: to let job seekers upload their profile for job providers to evaluate. When it comes to job boards, find out the top two or three as of when you're applying, create an account, and fill out your profile in all of them. For example, in 2020, Indeed, LinkedIn, and CareerBuilder seem to dominate this list.

There is no easy way to sync your data between these job boards, so you need to fill them in again each time. However, as you begin filling, you would soon notice that almost all the fields are exactly the same between them, thus reducing your cognitive load to think of new responses every time.





We focused on setting up your profile on job recruiting sites in this section, but you can also get creative in leveraging *other* social media sites. Graphic designers have turned to Instagram to expand their network, writers use blogging platforms like WordPress or the more *chic* Medium to express their thoughts, and coders turn to GitHub to keep all their projects up-to-date. Where do you fit? **Or, how do you want to stand out?**



## PLANT THE SEEDS OF NETWORKING

The phrase *your network is your net worth* will come to life as you enter graduate school.

| < >                                                           |  | Today                                                                            |  | February 2020                                                                                             |  | List                                                          |  | Month                                                                                                 |  | Week                                    |  | Day |  |
|---------------------------------------------------------------|--|----------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------|--|-----------------------------------------|--|-----|--|
| Sun                                                           |  | Mon                                                                              |  | Tue                                                                                                       |  | Wed                                                           |  | Thu                                                                                                   |  | Fri                                     |  | Sat |  |
| 26                                                            |  | 27                                                                               |  | 28                                                                                                        |  | 29                                                            |  | 30                                                                                                    |  | 31                                      |  | 1   |  |
| 10a Gay Men's Rel<br>12p Inequality and<br>1p Guiding Student |  | 11a NCFDD Webin<br>12p Graduate and I<br>1p Engaging in Sch                      |  | 5p Is populism rest                                                                                       |  | 2p Breaking the Po<br>5p Black Women's I<br>6p BBQ Dinner hos |  | 9a Fossil Fuel Auth<br>10a Gender and Po<br>3p Foundations of                                         |  | 2p GSA presents: P                      |  |     |  |
| 2                                                             |  | 3                                                                                |  | 4                                                                                                         |  | 5                                                             |  | 6                                                                                                     |  | 7                                       |  | 8   |  |
| 10a Gay Men's Rel<br>5p Annual Vassiliat                      |  | 12p Graduate and I<br>3:30p UC President                                         |  | 6p BRC Mid-Year M                                                                                         |  | 12:30p Getting Stai                                           |  | 10a Workshop on V<br>10a Grad Div Open<br>1p Cultured Data S<br>3p Foundations of<br>6:30p Pizza Game |  |                                         |  |     |  |
| 9                                                             |  | 10                                                                               |  | 11                                                                                                        |  | 12                                                            |  | 13                                                                                                    |  | 14                                      |  | 15  |  |
| Deadline for UCDC<br>10a Gay Men's Rel<br>12:30p Public Spe   |  | Grad SLAM Prelimi<br>12p Book Club Mes<br>12p Graduate and I<br>4p Fukushima Spe |  | Grad SLAM Prelimi<br>12p Lecture: Urban<br>1p WISE Forum Gra<br>2p Cal Fresh Mini C<br>5p Sharing Science |  | Grad SLAM Prelimi<br>10a Building Comm<br>5p Black Women's I  |  | 10a Roundtable: To<br>3p Foundations of                                                               |  |                                         |  |     |  |
| 16                                                            |  | 17                                                                               |  | 18                                                                                                        |  | 19                                                            |  | 20                                                                                                    |  | 21                                      |  | 22  |  |
| 10a Gay Men's Rel                                             |  | 12p Graduate and I                                                               |  |                                                                                                           |  |                                                               |  | 10a Designing Effe<br>10a AAAS Science<br>12p Deadline for C                                          |  | 3p Foundations of                       |  |     |  |
| 23                                                            |  | 24                                                                               |  | 25                                                                                                        |  | 26                                                            |  | 27                                                                                                    |  | 28                                      |  | 29  |  |
| 10a Gay Men's Rel                                             |  | 12p Graduate and I                                                               |  |                                                                                                           |  |                                                               |  | 8:30a Transition to<br>5p Black Women's I                                                             |  | 1p Fostering Growt<br>3p Foundations of |  |     |  |
| 1                                                             |  | 2                                                                                |  | 3                                                                                                         |  | 4                                                             |  | 5                                                                                                     |  | 6                                       |  | 7   |  |
| 10a Gay Men's Rel                                             |  | 12p Graduate and I                                                               |  |                                                                                                           |  |                                                               |  | 12:30p Hidden Cui                                                                                     |  | 3p Foundations of                       |  |     |  |

That's the *grad life* calendar of University of California San Diego<sup>[18]</sup>. Every week is filled with a melange of events, workshops, and seminars, and you have the fun job of choosing how best to optimize your time while attending all the events that are important to you. This is not an easy task. This has to be done in addition to 10 hours of classes, possibly 20 hours of assignments, and even more time spent searching for a job.

But once again, you've got a great head start! You can begin laying the groundwork *right now*.



Glad you asked! LinkedIn has transformed from a job recruiting site to a powerful networking *and* learning tool. There is a whole suite of courses on LinkedIn just to help you use the platform effectively<sup>[19]</sup>. The learning curve to use LinkedIn is not steep: you will be able to perform all the basic functions right off the bat. On the other hand, the learning curve to use it to *stand out* is pretty steep. We'll talk about three ways you can do that below. If you want a more in-depth dive into this topic, we recommend you resort to one of the many free courses found online<sup>[20]</sup>.

## FINDING CONNECTIONS

Roshni Chellani<sup>[21]</sup>, a Qualcomm engineer and LinkedIn influencer, says, “Students would have much more success with LinkedIn if they perceive it as a way to propel their curiosity by making genuine, lasting connections rather than perceiving it as a mere job search engine.”

And she did exactly that. She spent countless hours understanding the intricacies of how LinkedIn works to experiment with the lesser-known

features and form lasting connections. Owing to her curiosity, she ended up meeting Jay Shetty, a famous author and motivational speaker<sup>[22]</sup>.

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The journey doesn't end with creating a stellar profile;  
it *begins* with it.

---

In the beginning, it's better to cast a wide net. Start connecting with the people you *already* know. Beyond that, Roshni suggests using groups, university pages, and company pages to find more people to connect with.

**Groups:** To find like-minded people, you need to be a part of groups that matter to *you*. As of this writing, LinkedIn has close to 1.87 million groups<sup>[23]</sup>. Find the *Groups* option under the *Work* pane on your top right corner. Using the search functionality, look for groups related to your interests and university (both undergraduate and graduate school).



The biggest selling point of LinkedIn groups is the lack of barrier to send messages to second and third degree connections. When you are part of a LinkedIn group, **you can message anyone in the group**, even if you aren't connected or don't have a premium subscription<sup>[24]</sup>.

This is a huge win for many reasons. First, you aren't constrained by the length of the message unlike a connection request that caps you at 300 characters. Second, it shows up as a regular message in their inbox instead of a connection request, thus improving the chances of visibility. Finally, they can see that you both are part of a group and hence already have a common ground to kick off a conversation.



If you don't find a particular group you were looking for, simply **create one yourself.**

**University pages:** Some of the most helpful people you meet will turn out to be the alumni from your undergraduate and graduate school. Having walked the same roads and sat through relatable courses, they get you. All you need to do is reach out and make an introduction. The university pages on LinkedIn make this terribly easy by having an *Alumni* tab.



Every university has its own page on LinkedIn with an *Alumni* tab. The highlight here is the ability to filter across seven categories<sup>[25]</sup>: **location, company, job title, major, top skill, start and end year of school, and degree of connection.**

Using this powerful capability, you can easily filter to find people who are, say, Product Managers at one of the Salesforce offices in the U.S. who completed their degree at Columbia University between 2005 and 2020.

The screenshot shows the LinkedIn profile of Columbia University in the City of New York. The page is viewed from the 'Alumni' tab. The header includes the university's name, location (New York, NY), and follower count (209,077+ alumni, 416,734 followers). A 'Contact us' button is visible. Below the header, a navigation menu on the left lists 'Home', 'About', 'Jobs', 'Alumni' (selected), 'Videos', and 'Ads'. The main content area displays '6 alumni' and a search bar. Filters are applied: 'Product Management' (selected), 'Salesforce' (selected), 'United States' (selected), and 'Clear all'. The 'Where they live' section shows a bar chart with 6 alumni in the United States, 3 in the San Francisco Bay Area, and 3 in the Greater Seattle Area. The 'Where they work' section shows a bar chart with 35 alumni at Google, 25 at Amazon, and 19 at Columbia University in the City of New York. The 'Start year' is set to 2005 and the 'End year' is set to 2020.

Using this feature, you can reach out to a small set of targeted alumni with a tailored introduction.

If you have some more time on hand, peruse the *Videos* section to find something interesting. If you notice a video featuring someone or a comment by someone you find insightful, connect right away and mention this in your message.

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80% of students don't do this. Be the 20%.

---

**Company pages:** This is very similar to university pages. Instead of an *Alumni* tab, you will find a *People* tab with almost all the categories as before, except the company name is now switched with the university name and you no longer have the feature to specify the start and end year of school.



In addition to the tabs seen under a university, every company has a *Life* section that can be leveraged to your advantage. Under the *Life* tab, you can find trending posts, articles, and testimonials from the employees. This is a great starting point to use to connect with someone and let them know that you read their post.

We want you to spend some time on this topic since your first degree connections will have a huge impact on your experience using the tool. If you are connected with a diverse set of students and employees (across various universities, companies, location, and industry), your LinkedIn home feed will also be diverse. If you only connected with your friends and peers from bachelor's, you are limiting the potential to be exposed to more rich content.

Being a Product Manager, a majority of my connections are also Product

Managers at different levels in their career, which leads to me being exposed to content related to building products more so than any other topic. As the years pass, you will also naturally gravitate towards a specific archetype of people and content. For now, keep your network wide.

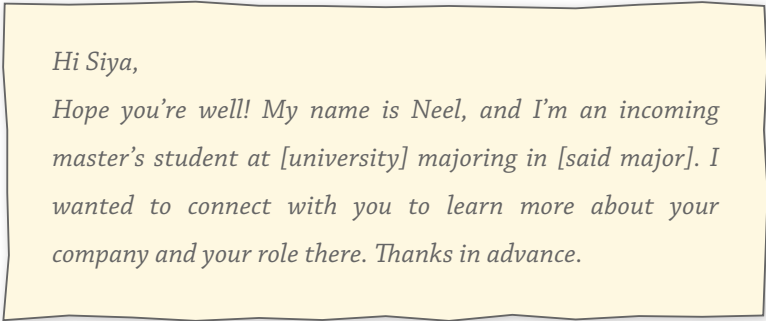
## SENDING THE FIRST MESSAGE

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First impressions matter.

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Most of the LinkedIn requests we see have the following generic template:



*Hi Siya,  
Hope you're well! My name is Neel, and I'm an incoming master's student at [university] majoring in [said major]. I wanted to connect with you to learn more about your company and your role there. Thanks in advance.*

When a working professional sees this, their first impression of the sender is that they are lazy. This question doesn't need to be answered by a person; it can be answered by a web search engine.

---

When you reach out to someone for the first time,  
do *not* ask for favors in the first message.

---

You should merely focus on getting connected and slowly establishing a relationship. A better version of the previous message is shown on the next page:

*Hi Siya,*

*How are you? I'm so excited to let you know that I'll be pursuing my master's at [university] starting this Fall. I plan to learn a lot from this experience, especially from the students who've been through it. For now, I'd love to connect with you and follow you on your professional endeavors.*

This tells the other person that you're excited and hope to speak to them someday, but *not yet*. For now, you just wish to follow their posts and keep up with their future endeavors. Be sparing in asking favors when you haven't begun your graduate school. Use this time to reach out to people you wish to speak to, both current students and alumni, once you begin your studies.

However, even this seems a little generic. Let's see an even better example:

*Hi Siya,*

*When I was reading your article on diversity & inclusion, I noticed that you too were the head of your university's SWN chapter. I had the best time working with my team of 20. I'm beginning my master's this fall at [university]. I'm so excited and would love to connect with you and follow your journey.*

Now, *that's* a message most people would respond to.

Unlike the first two messages, this one shows the receiver that you spent some time learning about them before blasting an invite. You will be able to find a common ground in most cases in the form of past experiences. Even if you don't find a commonality, at the very least you can make a comment on one of their recent posts or articles.

## KEEPING YOUR NETWORK ENGAGED

Jonathan Javier<sup>[26]</sup>, the founder of Wonsulting and a LinkedIn influencer, says, *“Put your community first because when you do, you’ll build a foundation of friends who will support you no matter what.”*

Most of the posts made by Jon garner a huge, engaging audience, sometimes viewed by over 100,000 people. That is because he uses the platform to share his personal stories, mostly of his struggles, while ending each with a takeaway for the reader. Unlike many influencers, he also takes the time to respond to the comments on his posts and engage with his audience.



The advent of social media has given all of us a microphone through which we can broadcast even the most trivial thoughts we have to the entire world. Spend some time thinking about the kind of message you want to relay through this medium.

There are various kinds of posts you can create on LinkedIn (or any platform, really). We’ll highlight three types below.

**Sharing resources:** The best way to begin engaging with someone is to provide them value upfront. These are the kinds of posts where you can share resources that you’ve collected or created with careful care. It could be a powerful template for a resume, a framework you followed for choosing universities, or even a collection of flash cards you created for the GRE exam.

**Or hey, it can even be this book!**

Think about areas where you have unique knowledge and resources, and overlap that with the kind of people in your connections. Will they find it valuable? If yes, go ahead and make a post. Here is a sample:



*Hello LinkedIn,*

*I just spent three months preparing for my GRE exam and got a score of 328 (160 V 168 Q 5 AWA) after giving my exam today. I have compiled all the resources I used into the following:*

- a. A template of the 12 week plan I followed*
- b. A table containing the resources I used with feedback on how valuable they were*
- c. Most importantly, a personalized set of flashcards along with synonyms and sentence examples for 1500 words*

*This isn't of use to me anymore; but I'm sure it will be of use to you if you are beginning your preparation. Submit your email in this form [link] or comment it below and I will send it all to you in a neatly compiled folder.*

*Let's help each other.*

*#gre #studyplan #studyabroad #exam #masters*

A simple, straight-forward post.

Notice how the post begins with providing some context on *why* they should listen to you.

---

In an era where most products are free,  
the price you pay is your *attention*.

---

You need to give people a good reason to pay you with theirs.

**Sharing observations:** Think back to the last thought you had that made you go, *Wow. That was insightful!* There's a term for this: **shower thoughts**.



Shower thoughts are the eureka moments that come at you out of nowhere when you are engaged in a mentally and physically relaxing activity, like taking a shower. They are so popular that there is a subreddit on this topic with over 20 million members<sup>[27]</sup>.

**Shower thoughts arise because you let the prefrontal cortex of your brain run on autopilot.** Your prefrontal cortex is valuable for a lot of things: it helps you plan, make complex decisions, and focus deeply on a task. However, it also impedes you from having spontaneous bursts of creativity that surface when you let your mind wander. When you're showering or listening to music or walking in a park, unencumbered by distractions, your prefrontal cortex takes the back seat and lets the *default* mode of your brain take control of the wheel<sup>[28]</sup>. With the help of a little dopamine, new connections are formed in your brain that *sometimes* leads to a brilliant insight.

We aren't saying you should take a pen and paper with you every time you go for a walk. Rather, when you have a thought that seems insightful, make a note of it *after* you return from the activity. And there you have it: the recipe for a post. Below is an example based on one of my posts on LinkedIn<sup>[29]</sup>.

*What separates celebrities from the rest of us is not just money or fame; it's something more powerful.*

*If you think about it, on a daily basis, we spend a significant amount of our time making schedules, responding to and sending messages related to our career, and wondering if we*

*should be focusing on another opportunity out there.*

*A celebrity has a swarm of people whose only job is to work on those tasks: building out their schedule, responding to requests, and ensuring that at any point of time, what they spend their time on is the most efficient way to spend their time.*

*The good news is, even if we don't have a personal assistant to filter out the information we see, we can still build our own using the tools we have. Use Google Calendar along with an extension like Clockwise that automatically blocks uninterrupted periods of time on your calendar using AI; unsubscribe constantly and use powerful spam filters like Proofpoint to only see the emails you want to; Capture your thoughts on platforms like LinkedIn so you can always reference back when you need to.*

*We live in an era of information overload. Build your own attention filter.*

This post is not sharing a ready-made resource, rather a powerful thought:

---

We can be our own assistants by using  
the tools we have effectively.

---

By sharing such insights, you can build a community around you who will look forward to your posts and remember you as the person who made them *think*.

**Sharing stories:** These are the most powerful of posts, as witnessed from Jon's example. We all love reading and hearing stories. I grew up listening to

strange tales told by my grandfather as we sat down on the verandah every evening for a few hours. It was wonderful. There's a reason people fall in love with fictional characters such as *Harry Potter* and *Calvin and Hobbes*.



What is even better, however, is listening to someone's real-life story, as it helps us connect better with them, and remember them for longer. We aren't going to share any examples here, because **we want you to think about your own**. Don't limit it to success stories. Failures carry more power because they're more relatable, and reassuring.

Those were some examples to kindle your mind. But sometimes, even something simple can be powerful.

Akosua Boadi-Agyemand<sup>[30]</sup>, now a Program Manager at Microsoft, made a post<sup>[31]</sup> on LinkedIn two years ago merely asking for help with her job search, which went viral and got the attention of Jeff Weiner himself, who was the then-CEO of the platform. That one post led to her internship at Microsoft, followed by a full-time offer, and the beginning of what she calls a BOLD journey.

So go ahead. Engage with your community, share your journey, your thoughts, and maybe, just maybe, you might strike up a conversation because of it.



Just one final piece of advice when it comes to networking: *don't lose track*.

## THE PAVLOV DOG EXPERIMENT



Ivan Pavlov<sup>[32]</sup> is a famous guy among physiologists. He is most known for his work in **classical conditioning**, which is described as<sup>[33]</sup> *“learning to associate an unconditioned stimulus that already brings about a particular response (i.e., a reflex) with a new (conditioned) stimulus, so that the new stimulus brings about the same response.”*

Let’s decode that jargon with the famous Pavlov dog experiment. In the 1890s, Pavlov was researching the salivation in dogs in response to being fed. One day, he noticed that his dogs began salivating as soon as they heard the footsteps of the assistant approaching with the food. This instance, of watching the dogs display the same response even for objects or events *associated* with food as opposed to the food itself, changed the course of his research.

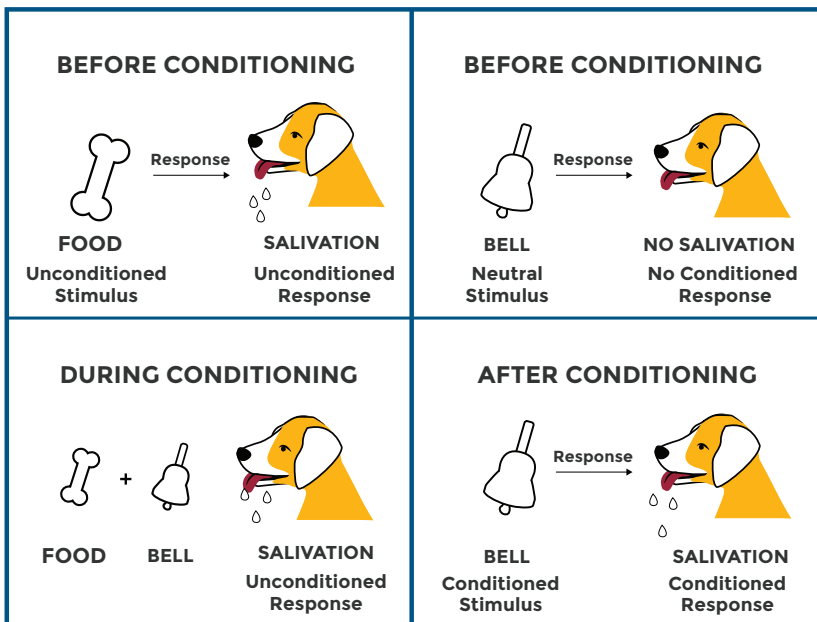
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He spent the rest of his life working to refine this theory.

---

It was clear to him that dogs didn’t have to be *taught* to salivate when they saw food. It was hard-wired into their system. So he conducted an experiment wherein every time he fed his dogs, thus generating the unconditioned response of salivation, he would also play a metronome<sup>[34]</sup>, a neutral stimulus that wouldn’t cause any salivation on its own. However, after a few such trials, he began playing the metronome *without* giving them food. The result? An increase in salivation.

He had found a way to associate a neutral conditioned stimulus (metronome) with an unconditioned stimulus (food) to generate the same response (salivation) even when there was no unconditioned stimulus (food).



The theory of classical conditioning doesn't manifest itself only in dogs though. We are just as much influenced by it. Think back to the classes you had *just* before your lunch break in school. You probably felt hungry as soon as the bell rang, even if you weren't hungry a few minutes before. Why? Classical conditioning. We tend to associate the bell with food.

Now that we know this is possible, we can leverage it to our advantage.

## CLASSICAL CONDITIONING AND NETWORKING

We created a *Networking* tab for you in your *Dream Tracker*. Since you will be speaking to dozens of people every month, or even every week once you begin your graduate studies, internalizing the action of taking notes and following up after a call is crucial.



Every time you know you are bound to have a call with someone, set a reminder on your phone to *beep* exactly 30 minutes after the call is scheduled to happen. That way, as soon as you get off the call, or a few minutes later, you will hear a *ding* that will prompt you to note down their names and details in the tracking sheet. If you condition yourself to do this enough times, you will begin to note it down even without the *ding*.

Now, during this downtime, when you are laying the groundwork, you can set up the tools you need, such as a tracking sheet and a reminder app, to do this effortlessly later on. While we do not suggest reaching out to alumni and current students for job opportunities, we do recommend making that initial contact and following up with tailored questions.

With that, we've reached the end of the section on networking 101. Let's look at the third and final vertical of preparation before you leave your home country.



## BE YOUR OWN TEACHER

We live in an era where you have access to the most brilliant of minds around the world through the virtue of **Massive Open Online Courses (MOOCs)**. MOOCs have an interesting history, by having *two* histories. It was almost as if there were two separate trains, one that began in 2008 and the other in 2011, both running down close parallel tracks to democratize education but through different philosophies.

### MOOC: A BRIEF HISTORY

George Siemens<sup>[35]</sup>, a research and writer, introduced a term **Connectivism** in a paper in 2004<sup>[36]</sup>.

“ *Connectivism is a theoretical framework for understanding learning. In connectivism, the starting point for learning occurs when knowledge is actuated through the process of a learner connecting to and feeding information into a learning community. The learning process is cyclical, in that learners will connect to a network to share and find new information, will modify their beliefs on the basis of new learning, and will then connect to a network to share these realizations and find new information once more. Learning is considered a “... knowledge creation process ... not only knowledge consumption.* ”

Connectivism can best be thought of as a learning theory that is built on the following foundations<sup>[37]</sup>:

- ▶ Learning happens through interaction with your network
- ▶ Information will be updated constantly. Hence, the *curiosity* to know more is more important than what you know already
- ▶ Learning can happen outside ourselves as an entity

To explore this theory, he conducted an experiment in 2008 by creating a course titled *CCK08: Connectivism and Connective Knowledge* and opening it for enrollment to students outside the University of Manitoba, free of charge. This was the first time such an idea garnered a massive response, with thousands of students enrolling in it.

While that train began early on, another train, the more popular one, began its journey in 2011 when two professors from Stanford University hosted their course *CS271: Introduction to Artificial Intelligence* online and opened it for world-wide enrollment, free of charge. This time, over 160,000 students enrolled. It garnered wide media coverage. There were two other courses along with the one above, that had 104,000 and 65,000 students enrolled respectively.





The now famous learning platforms **Udacity** and **Coursera** were in fact founded by the professors behind these courses at Stanford<sup>[38]</sup>. This led to such a huge growth that 2012 was termed the *Year of the MOOC* by The New York Times<sup>[39]</sup>.

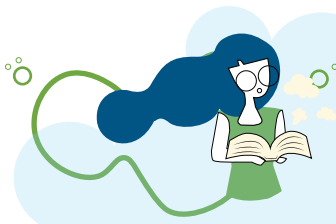
We call this a different train because while the philosophy behind George's idea involved loose structure and immense community interaction, platforms like Udacity and Coursera have a tight structure with *some* voluntary interaction.

Remember Prof. Walter Lewin? Remember his physics experiments? He is the guy who proved the conservation of energy phenomena by releasing a 15.5 kilogram pendulum at zero speed from his chin to demonstrate to the world that the pendulum *cannot* go higher when it returns from the swing<sup>[40]</sup>. If it had, it would have crushed his jaw, and perhaps his brain as well! Which is why his phrase, "*Physics works, and I'm still alive!*" became quite popular.

If you remember him, you've already experienced the concept of MOOCs early on in life. Online learning is on an unstoppable path, and you need to leverage it to your fullest right now.



Today, MOOCs are affiliated with **900+ universities** and have reached more than **110 million learners**. In 2019 alone, 2,500 new courses and 11 online degrees were launched<sup>[41]</sup>.



THAT'S A FASCINATING **HISTORY**.  
DO YOU HAVE A RECOMMENDATION ON  
COURSES I CAN TAKE?

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Even better, we will help you *think* about how to take courses.

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When you're thinking about what courses to take, use the following verticals as a guide:

**Domain specific:** As the name states, these are the courses that will help you most directly with your graduate school. If you were about to begin your degree in physics, then look at your coursework and see if any of those courses are available online. You don't need to do this for all of them. We are only recommending that you pick the course that seems most challenging and do some preparation beforehand for it.

**Hot topics:** We've all heard the buzzwords: artificial intelligence, blockchain technology, gene editing, next gen 5G technology, quantum computing, etc. Yet, do you *really* understand what they mean? Probably not. These are the buzzwords you hear because these are the topics that will in one way or another shape our future. 5G technology will introduce applications we can only imagine right now: doctors conducting virtual surgeries, autonomous vehicles swarming the road, and factories filled with connected robots<sup>[42]</sup>. Taking a course on these topics will certainly help you appreciate them better.

**Mind-expanding:** For lack of a better term, this refers to courses that are in no way directly related to your major, but can be highly useful in expanding the scope of your thoughts and give you more to think about. If you are, say, a chemical engineering student, some example courses would be *Ethics and AI*, *Health and Nutrition*, *Marketing for the Digital Age*, and *Behavioral Psychology*. None of those will help you with your exams (unless you're really creative), but they all come in handy in your life.

Now, pick one course each from each of the verticals above, find a platform where it is offered, and take it.

Courses are simply one of the ways to educate yourself. There are always other

mediums such as books (both paperback and digital), articles, papers, and community forums. All of this is simply to stimulate your mind to think in the right direction.

---

The underlying premise is that you should use this time to be your own teacher.

---

In the previous two chapters, we helped walk you through the best practices to successfully get your loan and visa. Those were non-negotiables without which you cannot enter or live in the host country. Compared to that, this chapter might seem trivial to you. Online profile, networking, e-learning... can't this all wait?

It can, *but do you want it to?*

There are two kinds of graduate students: those who scramble to get through the day, and those who are prepared well to *shine* through the day.

---

You decide which one you want to be.

---

With that, we've reached the very end of this journey. Just one more left to go.

## CONCLUSION

Kudos on completing the longest chapter in the book! And for reading till the very end. Getting your loan and visa is undeniably important. It's non-negotiable. You *need* them. However, among all that work, don't forget the things which will make your life so much easier. That's what this chapter is about. Life at graduate school is on overdrive, all the time. Don't expect a pause; rather, use the time *now* to prepare.

First, we looked at how you can create a stellar LinkedIn profile. We went through each of the fields in detail to talk about the best practices. The

journey doesn't end with creating one; it begins with it. Once you create a profile, begin planting the seeds of networking by finding potential connections via groups, university pages, and company pages. Then, reach out with preferably a personal message *without* asking for favors. And of course, use the platform to keep your community engaged.

If you have time and some unquenched curiosity, you can enter the world of MOOCs by taking online courses on topics related and unrelated to your major. This is a great time to be alive and learning. You have access to some of the best minds in the world at your fingertips. Use this downtime well.

## A LITTLE REFLECTION

- ▶ Was there a LinkedIn profile of someone that you really liked?
- ▶ What kind of message got you the most response?
- ▶ Have you been sharing more personal stories or observational ones?
- ▶ What is a topic, unrelated to your major, that fascinates you deeply?

## Chapter 18 ALL THAT MATTERS

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If you ask anyone who is in the U.S. (or another country) already, their answer to the question *what do you wish you did more before you left* would be unanimous, following similar threads.

---

I wish I spent more time with my family,  
friends, and loved ones.

---

There will *never* be enough time

There will never be enough time to take your mother to the theater to watch the latest movie with her favorite protagonist.

There will never be enough time to play cricket with your cousins on a Sunday morning by the seashore under the hot sun.

There will never be enough time to wake up early in the morning and join your father for his morning walk as he buys newspapers from three different kiosks and drinks a fresh cup of coffee.

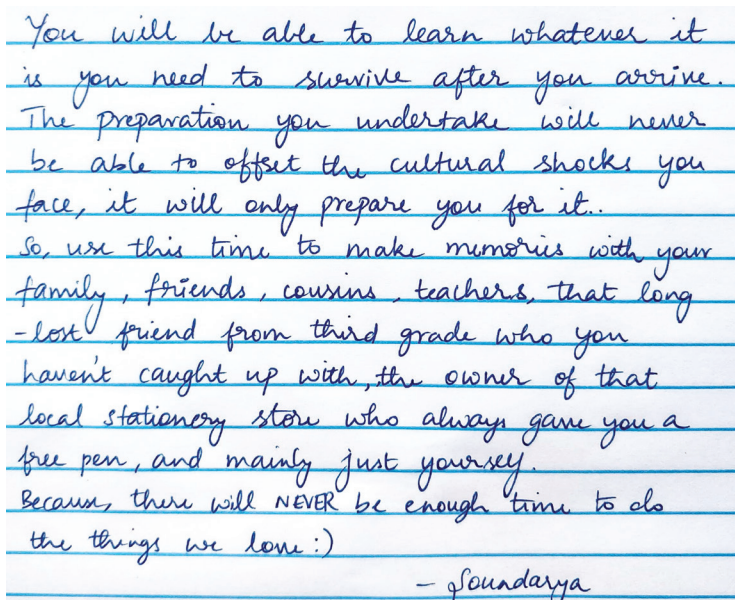
I know you have a *lot* to look forward to as you board that plane, but don't forget about the people, places, and memories you're leaving behind, that shaped your life into what it is today.

---

I have traveled back to India multiple times since I landed here,  
but it was never the same.

---

I always knew it was a temporary visit, jam-packed with good memories but ephemeral nonetheless. This is a feeling that no one can escape. Even if you weren't able to follow the hundred pieces of advice we offered throughout this book, I hope you walk away with this one. Just this one.

A photograph of a handwritten note on blue-lined paper. The text is written in blue ink and reads: "You will be able to learn whatever it is you need to survive after you arrive. The preparation you undertake will never be able to offset the cultural shocks you face, it will only prepare you for it. So, use this time to make memories with your family, friends, cousins, teachers, that long-lost friend from third grade who you haven't caught up with, the owner of that local stationery store who always gave you a free pen, and mainly just yourself. Because, there will NEVER be enough time to do the things we love :)". The signature "- Soundarya" is written at the bottom right.

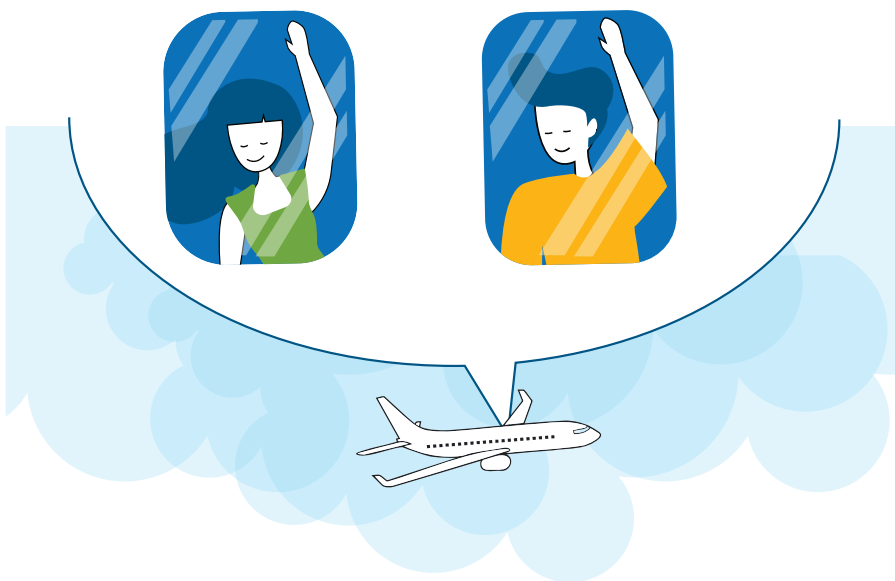
You will be able to learn whatever it is you need to survive after you arrive. The preparation you undertake will never be able to offset the cultural shocks you face, it will only prepare you for it. So, use this time to make memories with your family, friends, cousins, teachers, that long-lost friend from third grade who you haven't caught up with, the owner of that local stationery store who always gave you a free pen, and mainly just yourself. Because, there will NEVER be enough time to do the things we love :)  
- Soundarya

We are thrilled for you and hope you carry forward the gratitude you received so far from those around you to those who come after you.

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Go on and get educated.

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## Life At Grad School

One day while we were on a call, Rishabh asked, “*why don’t you add a section at the end to give the readers a glimpse into your experience?*”

So, here you go.

Fortunately, I love documenting my life through timeless entities, such as photographs, videos, and articles. I went through more than a thousand images to hand-pick these. While reviewing them, it felt like I was looking at a doppelgänger. Someone who looks like me and even acts like me in some images; but it isn’t me. Not who I am today.

---

The past three years had a profound impact  
on my life, for the *better*.

---

Graduate school in a new country will change you. It will help you shed many of the stereotypes you currently hold, make you unlearn and *relearn* cultural etiquettes. At times, it might feel disingenuous to change yourself so much. But, if there is anything we learned from our own history, it is that evolution is good, and it’s inevitable.

Embrace the change.

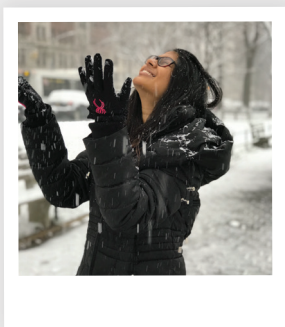
And, make sure to document it, so you can retell the story to those who come after you someday.



A hyper-excited me at Six Flags, New Jersey, about to ride the tallest roller coaster in the world



The first time I went on a boat cruise. Despite the biting cold, it was a spectacular night



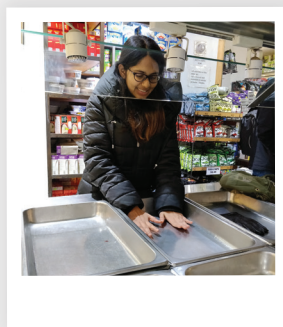
The first time I experienced snow, and realized what it means to get a frostbite



My first Christmas in New York. This ornately lit pathway is one of my favorite spots at Columbia



A “brainstorming” session I had with my friend, Sid, on ideas for my next YouTube video (ended up being a photoshoot)



New Year’s, 2018. We wanted to watch the ball drop, but it was so cold that we spent it at a deli warming our hands over a hot pan



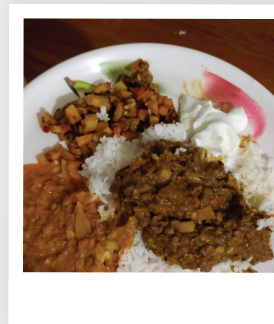
My first meal in New York



One of the many free meals we got. You can see how sparing I am when it comes to eating free food



The first time I had cookie dough (so good!) while roaming the streets of New York



Rice, daal, and potato curry. It doesn't get better than this



Me trying to be patriotic while cooking one of my first meals away from my home country



A random night when we bought half a dozen cupcakes and ate them while sitting on the floor and laughing

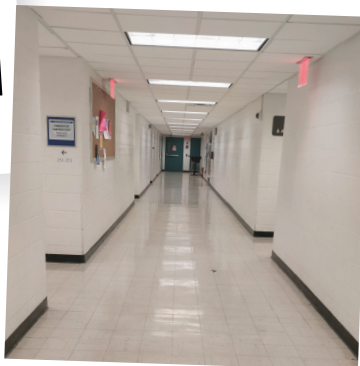


This is the view I was greeted with every morning as I rushed to class at 10:30 AM

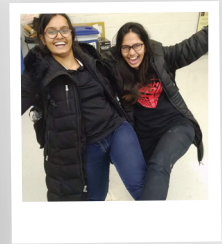
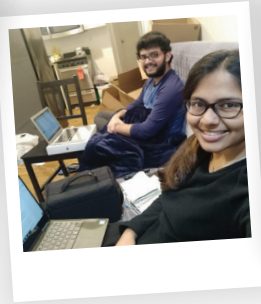
Watson Library, where I spent most of my afternoons in meetings and working on assignments



Alma Mater, where we would sometimes sit to look at the breathtaking Butler Library



Mudd Building, where I spent most of my nights between 10 PM and 4 AM



I hope the glimpses from my  
experience excite you even more to  
begin your amazing journey =)



## Acknowledgements

During the seven months that I worked on *Admitted*, I would pause at random moments during the day and think, *how lucky am I?* How lucky am I to be able to work with people who were almost as passionate about working on the book as me? How lucky indeed.

---

It really did take a village to get this book to you.

---



Let's start with my tiny and irreplaceable village back home: **my mother, father, brother, grandfather, and sister-in-law**. I like to think I got the writing-gene from my grandfather, who mesmerized me with tales when I was young and filled with imagination. My mom and dad have never stopped me from taking on a new venture, even if it meant I would put myself in challenging situations, and for that, I'm forever grateful. Whenever I face a major dilemma, my brother is who I turn to. Hearing him say something always makes it feel right. Finally, I can never thank my sister-in-law, Anu, enough for her constant support and encouragement.

There are six people without whom I *could not have* launched this book. **Saikishore Raju** was the first among the six to join the team. I've rarely seen someone with as diligent a work ethic as Sai. He tirelessly worked on the structure of many chapters and compiled a tremendous amount of research. I've known **Rishabh Singh** for three years. There is one thing I can say with certainty about him: he is one of *the* smartest people in the area of higher education I have ever met or will ever meet. Without Rishabh's involvement in writing and design, this book would be incomplete.

Two of the best decisions I made during the seven months was to get **Komal Telagavi** and **Nidhish Rajan** on the team. Komal was an absolute pleasure to work with. She is as creative as she is hard-working. Even when she had to spend six hours with me on calls, she never once complained. Nidhish joined late, but one wouldn't think that given the amount of work he managed to do in two months. Despite his full-time job, he worked *so much* that he would make me think that I should work harder. His work ethic is only trumped by his compassion. **Karthikeyan Eswaran**, my friend from NITT who I hadn't heard from in three years, emailed me exactly a month before we sent the full manuscript to the printer, generously offering his help to edit the book. In that month, he edited *every* chapter of the book meticulously *and* wrote the chapter on securing your loan with me. Finally, my dear friend and senior, **Shrinivas Padmaputra**, made it possible for me to get this to your hands. Anyone who knows him will agree when I say he is one of the most generous people one can meet. I can never thank him enough for his contribution throughout this process.

Aside from my core team, there are two people who deserve special mention: **Keerthi Kumar**, a talented designer and videographer whose name you see on the back cover, joined in the final few weeks to work tirelessly with Komal and compile the *entire* book. And, my best friend, **Siddharth Chamorthy**. Sid is the person who knows most about my journey, including the ups and downs. I would randomly give him a call to brainstorm an idea or just let out my excitement about the book; and he always listened. *And*, he wrote the chapter on visas with me.

The following people proof-read and gave suggestions to improve specific chapters: **Akshay Vasan, Kaivalya Gandhi, Aditya Aslesh Kumar, Srivatsan Ramesh, Utkarsh Binay, Smitha Sridharan, Harshahn J P, Aatman Vora, Lakshmi Manoharan, and Abhilash Somasamudramath**. Proof-reading and giving feedback requires intense concentration, and I'm very thankful to all of them for giving me that.

From the beginning, I wanted to get a testimonial for my book from a few key people. These are the names you see on the back cover. It is my immense honor and privilege to receive a review from **Dr. Srinivasan Sundarrajan**. He will always be my inspiration, and the best director NIT Trichy has ever seen. The scholarship that was a turning point in my academic life was the S.N. Bose scholarship. So you can imagine my amazement when **Aseem Z. Ansari and Naveeda Qadir**, founders of the program, themselves agreed to review my book. **Mindi Levinson** was my wonderful career counselor at Columbia who went above and beyond to help students. Finally, I'm thrilled that **Ramya Bhaskar**, a fearless entrepreneur in EdTech, also agreed to review my book.

I'm also honored to have gotten reviews from **Vidya Srinivasan** (a mentor and woman I look up to), **Saiman Shetty** (co-founder of ResumePuppy), **Shivani Srilakshmi**, and all my proof-readers. Last but not the least, here's a *huge* shout out to the YouTube celebrities and influencers **Harnoor Singh, Yudi J, Robert Adams**, and **Roshni Chellani** for giving me a review and also for providing you all with content that make your day!

Finally, how can I end this without thanking **you**? You, who trusted me enough to open up your pocket and spent many hours reading this book.

---

I don't consider *Admitted* to be a mere book.

---

This might sound romantic, even ridiculous, but *Admitted* to me is a part of me. It is a part filled with passion. So much of it. I enjoyed even the most mundane of tasks I had to perform related to the book. So you now have a part of me, and I *sincerely* hope you enjoyed reading it as much as I enjoyed writing it.

---

If you enjoyed reading *Admitted*, please tell a friend about it.

---



## Help Me Spread The Joy

Hi again,

If you read till here, you now possess the output of hundreds of hours of research, brainstorming, writing, and designing in your mind. That's quite powerful!

I love reading books because they are entities that stand the test of time. I get a glimpse into the author's mind, get access to their knowledge and experiences, all in a few hundred pages. I hope with *Admitted*, you got a glimpse into mine.

If you found the information you read valuable, you can help more people feel that joy by spending just a few minutes and writing your honest review.

---

Your review will help me more than you think.

---

- ▶ Simply, head to this custom link:

**[goto.admittedthebook.com/review](https://goto.admittedthebook.com/review)**



- ▶ Rate the book, add a headline for your review, and give me your honest feedback
- ▶ You can also take a picture with it and upload it :)

Thank you from the bottom of my heart for reading *Admitted*. I wish you nothing but the best for your future.

A handwritten signature in blue ink, appearing to read 'Soundarya' followed by a stylized flourish.

Soundarya Balasubramani

## Appendix

Please find below the citations for all the images referenced in the book.

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## References

When we were done with compiling the *over 400* references cited throughout the book, we realized that printing them here would add another *50 pages* to the book, making it heavier and more expensive, without adding direct value.

So, we decided to compile all the links in a single (good-looking) document that you can access at any point of time using the link or QR code below:

**[goto.admittedthebook.com/references](https://goto.admittedthebook.com/references)**



This way, you can read the book without distractions, and bookmark all the citations you want to visit later on at the end, using the link above.



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