

Tips For Surviving Graduate School And Getting A Job

Tianyi Gu

www.cs.unh.edu/~tg1034



University of New Hampshire



Introduction: Life at Grad School

Grad school is tough!

Introduction

■ Introduction

■ Overview

Joyful Grad School

Getting A Job

Negotiation

Conclusion

- climbing a knowledge mountain¹
- long working/studying hours
- limited resources
- juggling many things

Introduction: Life at Grad School

Introduction

■ Introduction

■ Overview

Joyful Grad School

Getting A Job

Negotiation

Conclusion

Grad school is tough!

- climbing a knowledge mountain¹
- long working/studying hours
- limited resources
- juggling many things

What's it for?

¹Matt Might: The illustrated guide to a Ph.D.

Introduction: Why Grad School?

Introduction

■ Introduction

■ Overview

Joyful Grad School

Getting A Job

Negotiation

Conclusion

Grad School is a training/preparation for a better life

- learning skill
- heavy workload endurance
- resource management
- juggling many things

Introduction: Why Grad School?

Introduction

■ Introduction

■ Overview

Joyful Grad School

Getting A Job

Negotiation

Conclusion

Grad School is a training/preparation for a better life

- learning skill
- heavy workload endurance
- resource management
- juggling many things

get all these through "simulation" for "free"

Introduction: Three Joyful Moments During Grad School

A tough training process can be full of joy!

Introduction

■ Introduction

■ Overview

Joyful Grad School

Getting A Job

Negotiation

Conclusion

Introduction: Three Joyful Moments During Grad School

Introduction

■ Introduction

■ Overview

Joyful Grad School

Getting A Job

Negotiation

Conclusion

A tough training process can be full of joy!

- get an idea
- get results
- share the idea with others

[Introduction](#)

■ [Introduction](#)

■ [Overview](#)

[Joyful Grad School](#)

[Getting A Job](#)

[Negotiation](#)

[Conclusion](#)

- How to achieve joyful moments
 - get an idea
 - get results
 - share your ideas with others
 - other tips
- Tips for getting a job
 - what you need
 - how to prepare
- Tips for negotiation
 - why
 - how

Introduction

Joyful Grad School

- Research Idea
- Results
- Sharing Ideas
- Other tips

Getting A Job

Negotiation

Conclusion

How to Achieve Joyful Moments?

1/3 Joyful Moments: Get An Research Idea

[Introduction](#)

[Joyful Grad School](#)

■ [Research Idea](#)

■ [Results](#)

■ [Sharing Ideas](#)

■ [Other tips](#)

[Getting A Job](#)

[Negotiation](#)

[Conclusion](#)

- reading research papers²
- attending seminar/research talk/conference
- conversation with
labmates/advisors/speakers/friends/families

1/3 Joyful Moments: Get An Research Idea

Introduction

Joyful Grad School

■ Research Idea

■ Results

■ Sharing Ideas

■ Other tips

Getting A Job

Negotiation

Conclusion

- reading research papers²
- attending seminar/research talk/conference
- conversation with labmates/advisors/speakers/friends/families

“The scientific problem chooses you; you don’t choose it”³

²Andrew NG: Career Advise and Reading Research Papers,
Harry Shum You are how you read

³Sven Koenig: What I Wish I Had Known Early in Graduate School but Didn't

2/3 Joyful Moments: Get Results

[Introduction](#)

[Joyful Grad School](#)

■ [Research Idea](#)

■ [Results](#)

■ [Sharing Ideas](#)

■ [Other tips](#)

[Getting A Job](#)

[Negotiation](#)

[Conclusion](#)

- the concept of cloud⁴
- negative results can also drive insights
- keep the machines busy

⁴Uri Alon TED talk: Why Science Demands A Leap Into The Unknown

3/3 Joyful Moments: Sharing Your Ideas

[Introduction](#)

[Joyful Grad School](#)

■ [Research Idea](#)

■ [Results](#)

■ [Sharing Ideas](#)

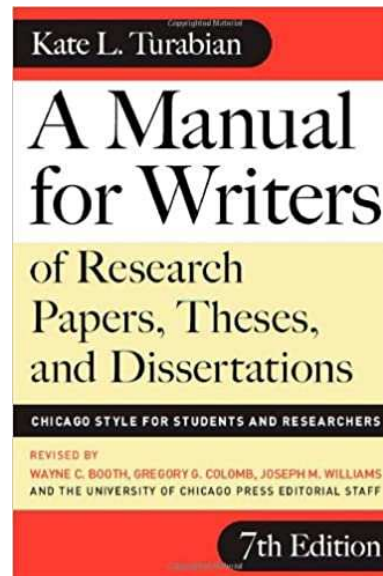
■ [Other tips](#)

[Getting A Job](#)

[Negotiation](#)

[Conclusion](#)

- write a paper: workshop, main track, journal
- research talks



Other Tips

Introduction

Joyful Grad School

■ Research Idea

■ Results

■ Sharing Ideas

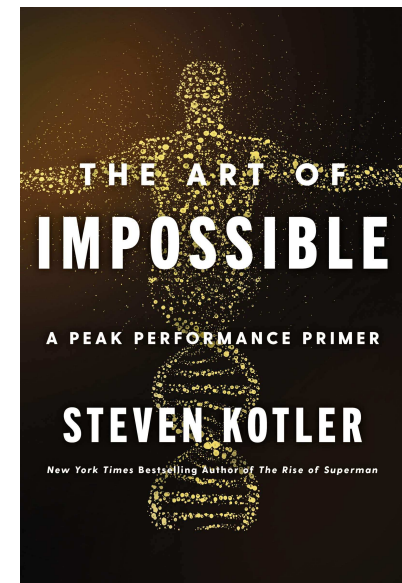
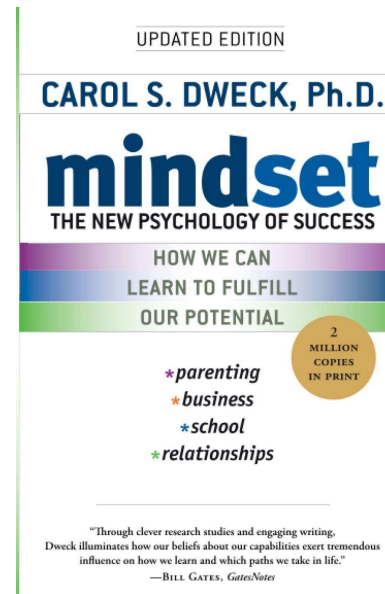
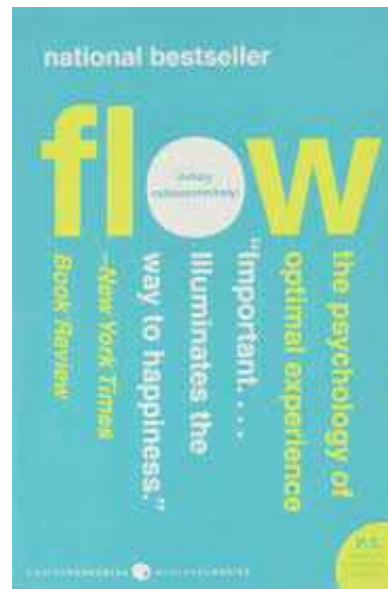
■ Other tips

Getting A Job

Negotiation

Conclusion

- Is TA/PAC worth it? Yes!
- Stress management: workout, meditation
- Flow
- Growth Mindset
- The Art of Impossible



Introduction

Joyful Grad School

Getting A Job

■ Careers

■ Industry Jobs

Negotiation

Conclusion

How to Get A Job?

What Are The Options?

[Introduction](#)

[Joyful Grad School](#)

[Getting A Job](#)

[■ Careers](#)

[■ Industry Jobs](#)

[Negotiation](#)

[Conclusion](#)

- academic research position (high freedom, low salary)
- industry research position (some freedom, median salary)
- industry engineering position (low freedom, high salary)

What You Need To Get An Industry Job?

[Introduction](#)

[Joyful Grad School](#)

[Getting A Job](#)

■ [Careers](#)

■ [Industry Jobs](#)

[Negotiation](#)

[Conclusion](#)

- internship experience
- connections
- interview skills

What You Need To Get An Industry Job?

[Introduction](#)

[Joyful Grad School](#)

[Getting A Job](#)

■ [Careers](#)

■ [Industry Jobs](#)

[Negotiation](#)

[Conclusion](#)

- internship experience
 - cv, personal page, github page, apply!
- connections
 - labmates, conferences, invited speakers, LinkedIn
- interview skills
 - CS 858 algorithm, leetcode⁵, practice⁶, real practice

⁵Sean Lee: How to Get a Job at the Big 4

⁶www.pramp.com

Introduction

Joyful Grad School

Getting A Job

Negotiation

■ Why Negotiate

■ Negotiation
Principles

■ Timeline

■ Interview Stage

■ Post-onsite

■ Research Leverage

■ Asks

Conclusion

Negotiation Tips

Why Negotiate?

[Introduction](#)

[Joyful Grad School](#)

[Getting A Job](#)

[Negotiation](#)

■ [Why Negotiate](#)

■ [Negotiation](#)

[Principles](#)

■ [Timeline](#)

■ [Interview Stage](#)

■ [Post-onsite](#)

■ [Research Leverage](#)

■ [Asks](#)

[Conclusion](#)

- Should I negotiate at all?

Yes! ⁷

- What I need for negotiation?

At least 2 offers, try your best to synchronize the offer receiving time

⁷AAAI-21 Rora webinar recording

<https://unh.app.box.com/s/085mxr0phvfjhrrsn0xt5mcdka88by31q>

General Negotiation Principles

Introduction

Joyful Grad School

Getting A Job

Negotiation

■ Why Negotiate

■ Negotiation Principles

■ Timeline

■ Interview Stage

■ Post-onsite

■ Research Leverage

■ Asks

Conclusion

- don't say yes on the phone first time you hear the number
- minimize information leak
- maximize information gain
- if you have to provide info, always ask something for return
- always support your ask with reasons ⁸
- successful negotiation should hear 'NO'

⁸<https://aipaygrad.es/>
www.glassdoor.com

How to Negotiate For Your Dream Offer?

Introduction

Joyful Grad School

Getting A Job

Negotiation

■ Why Negotiate

■ Negotiation Principles

■ **Timeline**

■ Interview Stage

■ Post-onsite

■ Research Leverage

■ Asks

Conclusion

Timeline ⁹

- interview stage
- post-onsite
- research-leverage stage

⁹<https://www.teamrora.com/learn>

Negotiation: Interview Stage

Introduction

Joyful Grad School

Getting A Job

Negotiation

■ Why Negotiate

■ Negotiation Principles

■ Timeline

■ Interview Stage

■ Post-onsite

■ Research Leverage

■ Asks

Conclusion

■ interview stage

“What are you looking for in terms of salary?”

“I am still understanding the role and responsibilities and I will focus on that for now. I'd prefer wait till I know there's a match to think about numbers”

“What is the other offer you got?”

“I am just starting negotiate with them. There's no number that I feel confident to share at this point.”

Negotiation: Post-on-site

[Introduction](#)

[Joyful Grad School](#)

[Getting A Job](#)

[Negotiation](#)

■ Why Negotiate

■ Negotiation

Principles

■ Timeline

■ Interview Stage

■ **Post-on-site**

■ Research Leverage

■ Asks

[Conclusion](#)

■ interview stage

■ post-on-site

- first phone call: thanks for the offer and say nothing

- second phone call: get the full package

 - base (\$150k/year)

 - annual bonus (12%)

 - stock option (50k RSU = \$300k for 4 years total)¹⁰

 - signing bonus (\$20k)

 - relocation bonus (\$20k)

 - Leveling (L4)

 - other benefit (paid leave, paid vacation, WFH days, 401k match, medical insurance...)

$\text{average/year} = 150 \times 1.12 + 75 + 10 = \$253k$

¹⁰<https://carta.com/blog/what-is-stock-vesting/>,
<https://carta.com/blog/what-are-incentive-stock-options/>,
www.optionimpact.com

Negotiation: Post-onsite

[Introduction](#)

[Joyful Grad School](#)

[Getting A Job](#)

[Negotiation](#)

■ Why Negotiate

■ Negotiation Principles

■ Timeline

■ Interview Stage

■ **Post-onsite**

■ Research Leverage

■ Asks

[Conclusion](#)

- interview stage
- post-onsite

“How’s it sound?”

“Can you share the full package? I can’t evaluate it fairly without knowing the full package.”

“Let me think about it offline and do more research on it”

“I need to talk with my family/wife/advisor/...”

Negotiation: Research-leverage Stage

Introduction

Joyful Grad School

Getting A Job

Negotiation

■ Why Negotiate

■ Negotiation
Principles

■ Timeline

■ Interview Stage

■ Post-onsite

■ **Research Leverage**

■ Asks

Conclusion

- interview stage
- post-onsite
- research-leverage stage
 - hiring manager call

Negotiation: Research-leverage Stage

[Introduction](#)

[Joyful Grad School](#)

[Getting A Job](#)

[Negotiation](#)

■ Why Negotiate

■ Negotiation

Principles

■ Timeline

■ Interview Stage

■ Post-onsite

■ **Research Leverage**

■ Asks

[Conclusion](#)

- interview stage
- post-onsite
- research-leverage stage
 - hiring manager call

“What was the interview feedback?”

“What’s the most exciting contribution/value I can bring to the team?”

“How someone grow in this role?”

“...”

“Can I get support in helping me in the negotiation with the recruiter?”

Negotiation: Research-leverage Stage

Introduction

Joyful Grad School

Getting A Job

Negotiation

■ Why Negotiate

■ Negotiation

Principles

■ Timeline

■ Interview Stage

■ Post-onsite

■ **Research Leverage**

■ Asks

Conclusion

- interview stage
- post-onsite
- research-leverage stage
 - hiring manager (HM) call
 - teammate call

Negotiation: Research-leverage Stage

[Introduction](#)

[Joyful Grad School](#)

[Getting A Job](#)

[Negotiation](#)

■ Why Negotiate

■ Negotiation

Principles

■ Timeline

■ Interview Stage

■ Post-onsite

■ **Research Leverage**

■ Asks

[Conclusion](#)

- interview stage
- post-onsite
- research-leverage stage
 - hiring manager (HM) call
 - teammate call

“Who would we report to? What is their background?”

“How about the team? How is the team structured?”

“What’s difference between your level and the next level up?”

“How has the manager worked with you to set goals and achieve them?”

“ ... ”

“I’m new to this whole full-time job search, what would you have wished you had known before when you were in my shoes? or something you wish you had done but didnt?”

Push For Your Fair Market Value

[Introduction](#)

[Joyful Grad School](#)

[Getting A Job](#)

[Negotiation](#)

■ Why Negotiate

■ Negotiation Principles

■ Timeline

■ Interview Stage

■ Post-onsite

■ Research Leverage

■ Asks

[Conclusion](#)

negotiation process: 2-4 weeks after get the first offer

■ ask #1 : 200k → 300k without showing counter-offer

Push For Your Fair Market Value

Introduction

Joyful Grad School

Getting A Job

Negotiation

■ Why Negotiate

■ Negotiation Principles

■ Timeline

■ Interview Stage

■ Post-onsite

■ Research Leverage

■ Asks

Conclusion

negotiation process: 2-4 weeks after get the first offer

- **ask #1** : 200k → 300k without showing counter-offer
- offer #2 : say nothing on the phone, or fuzzy sentence like I believe it is on the right track
- research-leverage stage 2 : another offer come in / new concerns raise to HM / talk to CEO/CTO/CFO

Push For Your Fair Market Value

Introduction

Joyful Grad School

Getting A Job

Negotiation

■ Why Negotiate

■ Negotiation Principles

■ Timeline

■ Interview Stage

■ Post-onsite

■ Research Leverage

■ Asks

Conclusion

negotiation process: 2-4 weeks after get the first offer

- **ask #1** : 200k → 300k without showing counter-offer
- offer #2 : say nothing on the phone, or fuzzy sentence like I believe it is on the right track
- research-leverage stage 2 : another offer come in / new concerns raise to HM / talk to CEO/CTO/CFO
- **ask #2** : 300k → 400k new evidence / showing counter-offer
- offer #3 : you are currently my #2, I am super exited about the project/team, but ...
- research-leverage stage 3 : new counter-offer come in, ask for help from hiring manager again

Push For Your Fair Market Value

Introduction

Joyful Grad School

Getting A Job

Negotiation

■ Why Negotiate

■ Negotiation Principles

■ Timeline

■ Interview Stage

■ Post-onsite

■ Research Leverage

■ Asks

Conclusion

negotiation process: 2-4 weeks after get the first offer

- **ask #1** : 200k → 300k without showing counter-offer
- offer #2 : say nothing on the phone, or fuzzy sentence like I believe it is on the right track
- research-leverage stage 2 : another offer come in / new concerns raise to HM / talk to CEO/CTO/CFO
- **ask #2** : 300k → 400k new evidence / showing counter-offer
- offer #3 : you are currently my #2, I am super exited about the project/team, but ...
- research-leverage stage 3 : new counter-offer come in, ask for help from hiring manager again
- **ask #3**: 400k → 450k
- offer #4: 420k, final push: if you can bring it to 430k I will sign it right way and cancel all other interviews.
- ...

[Introduction](#)

[Joyful Grad School](#)

[Getting A Job](#)

[Negotiation](#)

[Conclusion](#)

■ Conclusions

Conclusion

Conclusion

[Introduction](#)

[Joyful Grad School](#)

[Getting A Job](#)

[Negotiation](#)

[Conclusion](#)

■ [Conclusions](#)

- Grad school is tough but can be full of joy!
 - get an research idea
 - get results
 - share your ideas with others

Conclusion

[Introduction](#)

[Joyful Grad School](#)

[Getting A Job](#)

[Negotiation](#)

[Conclusion](#)

■ [Conclusions](#)

- Grad school is tough but can be full of joy!
 - get an research idea
 - get results
 - share your ideas with others
- To get a job, you need start to prepare as early as possible
 - internship
 - connections
 - interview skills

Conclusion

[Introduction](#)

[Joyful Grad School](#)

[Getting A Job](#)

[Negotiation](#)

[Conclusion](#)

■ [Conclusions](#)

- Grad school is tough but can be full of joy!
 - get an research idea
 - get results
 - share your ideas with others
- To get a job, you need start to prepare as early as possible
 - internship
 - connections
 - interview skills
- Negotiation for you dream offer
 - 6 principles
 - 3 negotiation stage

Questions?

[Introduction](#)

[Joyful Grad School](#)

[Getting A Job](#)

[Negotiation](#)

[Conclusion](#)

[Questions](#)

■ [Questions?](#)

