

Tips For Surviving Graduate School And Getting A Job

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Introduction: Life at Grad School

Grad school is tough!

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

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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.

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Grad School is a training/preparation for a better life

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

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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!

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A tough training process can be full of joy!

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

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- 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

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- Research Idea
- Results
- Sharing Ideas
- Other tips

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How to Achieve Joyful Moments?

1/3 Joyful Moments: Get An Research Idea

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

1/3 Joyful Moments: Get An Research Idea

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- reading research papers²
- attending seminar/research talk/conference
- conversation with labmates/advisor/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

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- 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

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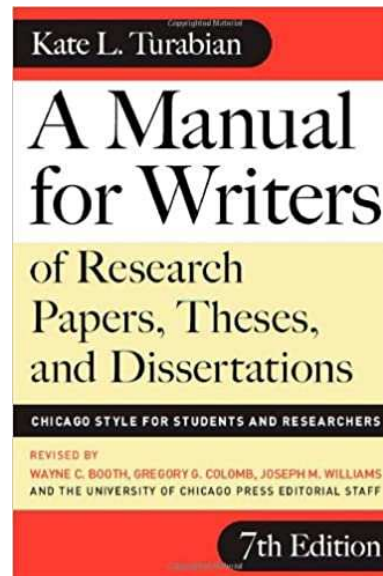
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- write a paper: workshop, main track, journal
- research talks



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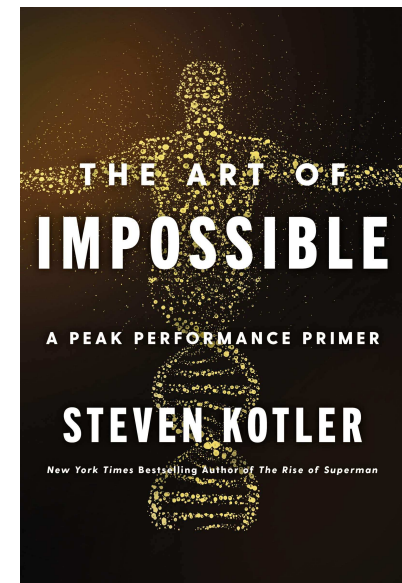
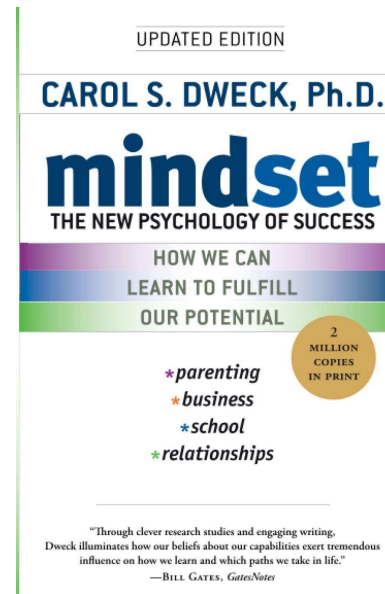
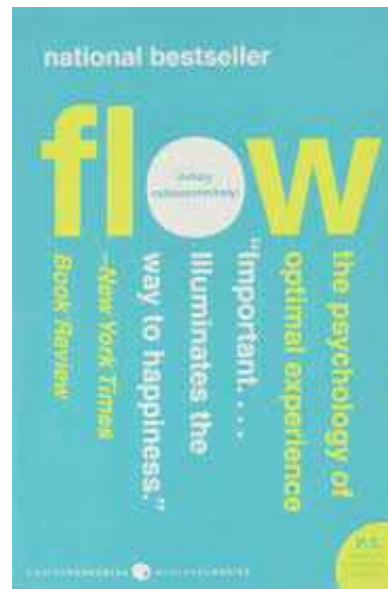
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- Is TA/PAC worth it? Yes!
- Stress management: workout, meditation
- Flow
- Growth Mindset
- The Art of Impossible



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How to Get A Job?

What Are The Options?

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

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- internship experience
- connections
- interview skills

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- 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

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- 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

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- 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?

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Timeline ⁹

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

⁹<https://www.teamrora.com/learn>

Negotiation: Interview Stage

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■ 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.”

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■ interview stage

■ post-onsite

- 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...)

average/year = 150 + 75 + 10 = \$235k

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

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- 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

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

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 - 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?”

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- research-leverage stage
 - hiring manager (HM) call
 - teammate call

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 - 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

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

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

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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

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- 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

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- **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.
- ...

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

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

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