CPSC 455 (2024S)
Making the Most of Your Career

July 2024

Jeremy Goh

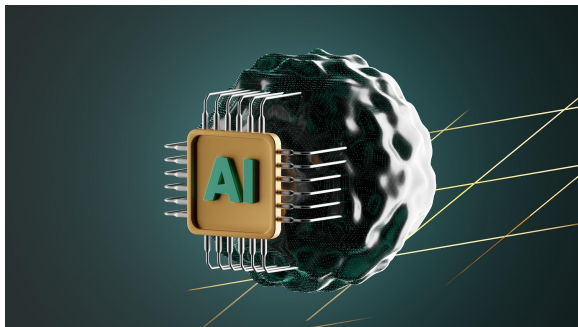# A little about me

So how's the job search going?

How things have changed in the last 2 years

A comprehensive list of 2023 tech layoffs

From major layoffs at Google, Amazon and Microsoft to small fintech startups and apps

Alyssa Stringer   @alyssastring   /   5:26 AM PDT • July 20, 2023

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BUSINESS
INSIDER

Alphabet's DeepMind has put a hiring freeze on new interns, canceling one applicant's interview with just an hour's notice

💬 1

Jyoti Mann
November 27, 2022 · 2 min read

OpenAI

Current State of the Industry

- We went from a period of crazy growth, over-hiring, easy capital, to layoffs and hiring freezes
- Good News:
  - More positions are opening up even for junior roles compared to 2023
- Bad News:
  - Expect competition for these positions to be fierce since there's a high volume of applicants and it can be hard to differentiate yourself early in your career
  - We're not anywhere close to the hiring frenzy of a few years ago and may not get there again
  - Heavy preference for returning interns (for full time job offers) and internal referrals
- Expect to invest a significant amount of time to land a job

Agenda

- Mindset and Approach
- Getting an interview
- Passing your interview
- Making the most of your job
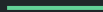
Mindset and Approach

The Job Search is Hard but it's Worth it

- You spend so much of your time and life at work
- Your first job can make a huge difference to your career trajectory
  - Brand names on a resume **make a difference**
  - You can't grow as quickly if you don't have the right opportunities and mentors
- Good people can make anything fun/worthwhile
  - Unfortunately the reverse is also true
- Take the time to explore different interests and career paths
  - This is the best (lowest risk) time to do it
  - Co-op is a great opportunity to learn about a new field or industry and see if it's right for you
  - Be thoughtful about your last few internships/co-ops since those are good pathways to a full-time job

It's not the same as school

- Only some companies care about grades
  - And even then, mostly for junior positions
- The best students don't necessarily get the best jobs
  - Getting an A+ in your bridging module or non-CS elective is not going to help you reverse a linked list
- I spent 25% of my time on career/job search while at school and 75% during the terms I was actively interviewing
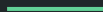
It's not the end of the world

- Control what you can control
- Success is subjective
  - The older I get the more I appreciate that it's about the process as much as the outcome
  - [Story of the Mexican Fisherman](#)

Rejections Happen

That's ok
Getting your first job is hard.

- http://rejected.us

What makes a good job?

- You decide!
- Some common criteria
    - Money - matters to an extent
    - Prestige
    - Domain
    - Learning
- Some considerations
    - It can be hard to transfer between domains (e.g. gaming)
    - Big companies can be a good way of learning the "right" way of doing things
    - Money isn't easy to quantify. Which stock would you pick pre-covid: Google or DoorDash? Who would have thought Microsoft would be back on top?
    - **Your manager can have an outsized impact on your experience**

It's a process

- Wicked problems
  - These are ones which you can't sit in a room and figure out
  - You need to get out there and try things
    - I've worked on different platforms, problem areas, companies
  - Designing Your Life by Burnett & Evans
- Trial and Error
  - Funnel: Getting an interview -> Passing your interviews -> Getting a Job -> Succeeding at it
  - Examples
    - Resume: Standing, Letter GPA

Be Strategic

- Time your applications
  - Deadlines
  - You want to put your best foot forward
- Companies have a cooling off period if you fail an interview
- Internships are one of the best ways to get a full-time job
- Don't wait for perfect. It's a numbers game and there's variance
  - There are so many applicants now that positions close quickly and they select the top 10 or 20 candidates to interview

Organization Tools
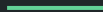
- [Trello](#)
- [Huntr](#) (Created by a BCSer!)

Getting an interview

Standing Out

- Finding the right jobs
- Who are the decision makers?
- Referrals and Networking
- Building a great resume

Finding the right jobs

- Apply for things even if you're not qualified (but strategize)
    - You don't need to meet all the requirements but be realistic
- Events
    - Hackathons
    - On-campus
- Keep up with the industry
    - Hacker News, TechCrunch
- Talk to people
- Google hacking

Who are the decision makers?

Step	Main Purpose	Decision Makers (* for mostly senior levels)
Resume Screen	Determining Whether to Interview You	Recruiter, engineers (at hiring events), Hiring Manager*
Intro Phone Call	If you're a good fit for the role, meet basic qualifications	Recruiter, Hiring Manager*
Technical Interviews/Final Round	Evaluating your skill. Are you the right person for the role?	Engineers, Hiring Manager

Decision Makers - What they're looking for

Decision Maker	Top of mind
Recruiter	- Does this person present themselves well? - Do they have a good chance of passing an interview? - Do they meet they meet the minimum requirements and logistics requirements?
Engineer	- Can they code? - Can they communicate effectively and outline tradeoffs and use the right algorithms and data structures? - Are they going to be a good teammate?
Hiring Manager	- Can I help coach and grow this person? - Does this person have the skills (or capability to acquire the skills) that will set them up for success from day 1? - Will this person help uplevel my team? - Does this person have a high growth trajectory?

The goal of a resume

- A clear, concise way of demonstrating your suitability for the job
  - Hiring managers and recruiters may not spend more than 30 seconds on your resume
- Highly recommend a header which outlines in a few sentences who you are, why you're special
  - e.g Computer Science major at the University of British Columbia and **full stack software engineer** with previous professional experience at **Google**
- Using **bold** text to highlight relevant keywords in your resume can help make it more parseable

Common Mistakes

- Too long. **<u>1 PAGE ONLY</u>**
- Weird font, graphics, info (e.g. don't include your photo since that's unusual for North America)
- Use .docx - seriously, use a pdf. It will load so much faster
- Not selling enough. This is your 30 second chance to convince me why I should interview you over 200 other candidates.
- Not concise
- Doesn't call out relevant info
  - Graduation date, immigration status (for international positions)
- Poorly formatted
  - Needs to be parseable by an ATS
    - https://pushthatcode.substack.com/p/writing-a-resume-for-robots

How do you make your resume stand out?

- One or two line summary at the top to make it easy for a human to understand who you are, and why you're a good fit
- Previous professional experience
  - Brand names
    - If you interned at Google, you're more likely a good fit for Meta
    - Keep in mind recruiter have to go through hundreds of resumes for a single opening!
- Academic ability
- Side projects, interest, initiative.
  - Are you just going to be a body in a seat or someone who will help lift the team and make them more effective?
- Depth of role, achievements
  - What did you make happen that might not be possible with someone else in the exact same role?

Example

- Not great:
  - I was an intern at XYZ and built a dashboard for our client
- Ok
  - I led development for a dashboard feature which was used by 1000 of our most valued clients
- Better
  - I led development for client-facing dashboard that **we rolled out to 1000 clients** and which resulted in a **Y% increase in revenue**.
    - This project was particularly complex as it involved building a data warehouse for offline analysis and I collaborated with our data engineering team to design the schema used across several new product features

# But what do you do for your first position?

- Chicken and egg problem
  - Anything extra you do will help you stand out
- Go to meetups, join clubs, work on open source projects
  - Google Summer of Code
  - Volunteer
- Hackathons
  - Build something, learn something, network
- Go to conferences
  - Grace Hopper
- Some companies run internship programs for freshmen/sophomores with a focus on encouraging diversity
  - UberStar
  - Google STEP
  - Meta University

What about side projects?

- Choose a tutorial and riff on it
- Some examples
  - A small script that adds a ChatGPT bot to any website
  - A reddit bot that follows your around and upvotes your stuff
  - A clone of <insert latest cool app>
- Just start somewhere
- If it's on your resume, you better be able to demo it or talk about it
  - 1 finished project is better than 5 half finished ones

Referrals and Networking

- Want a job? Don't apply
- Networking 101
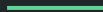
Want a job? Don't apply

- When you submit an application, your resume goes into a large stack and there's no guarantee someone will ever look at it
- Referrals are a way to flag your application as something a recruiter should prioritize
  - Friends or friends of friends who are full-time or interning at a company can refer you
- A referral can get you an interview or tip the scales if you're borderline in your interviews

Networking - Where do I start?

- You're already halfway there. Your friends!
- Events
  - **Hackathons**
  - Recruiting events
  - **Conferences**
  - Meetups
- Social networks
  - Blog, Twitter, **Piazza Careers**, LinkedIn
- Alumni

My approach to networking

- It's more of a mindset and being open to meeting new people
- Help others without expecting anything in return
    - Things will work themselves out
- Everyone has their own style, figure out which forum work for you
    - I liked hackathons
- It gets easier the more you do it

Networking - TODOs

- Read How to Win Friends and Influence People by Dale Carnegie
- Get LinkedIn and Piazza Careers and build out a profile
- Use LinkedIn to connect with people (make sure to add a message!)
- Pick one thing to get involved in
  - Sign up to tri-mentoring
  - Go up to a recruiter after a talk and ask a question
  - Write a blog and share it with others
  - Go to a meetup and learn a new skill while connecting with new people
  - Answer question on Reddit/Facebook student groups

Passing your interview

Interview Success

- Types and Purpose
- The grind
- Whiteboarding

Types of Interviews

- HR Screen
  - Work Auth, Communication, Trivia
- Technical
  - Where most people get rejected
- Take home project (optional)
- Behavioral

What do you need to show in a technical interview?

- Coding ability
- Computer Science fundamentals - Algorithms and Data Structures
- That you can break down a hard problem
- You can communicate and work with others

The grind

- It takes a LOT of prep
- Resources
  - Programming Interviews Exposed
  - Leetcode (premium + company)
  - Cracking the Coding Interview

Leetcoding - My Approach

- Start with easier or often asked questions for your target companies
- Try and solve within 15 minutes
- Read discussion forum and find optimal answer
- Repeat
- Come back later and repeat
- Understand the fundamental approach rather than memorizing
- Number of problems I've done

Whiteboarding

- Understand
  - Ask clarifying questions. Constraints
  - Sample cases
- Pattern match
- Think out loud
- Outline approach
- Consider complexities
- Code
- Test

What if you don't know where to start?

- It's ok to ask for a second to think about it
- Try and think about what makes the problem so hard
- Consider easier variants of the problem and see if they can help you build up a more general solution
- Consider other similar problems you've solved before
- Think out loud
- Make use of your interviewer's hints, guidance and body language
  - Hmm I'm not sure I understand where you're going with that, can you explain more?
    - i.e. you're probably on the wrong track

Example

- Find the most common element in an array

Example

- Find the most common element in an array
  - Understand
    - Does the array fit in memory
    - What types of elements
    - What if there's a tie
    - What if it's an empty array
  - Initial approach
    - We have to check every element. No matter what it's O(n) runtime
    - How could we do better?
    - How much space will we use?

Interviews are a two way street

- Don't forget you're also interviewing them
- Have questions prepared!
  - How do you typically determine what to work on?
  - Why did you decide to join this company?
  - I heard your team works on technology X, why did you decide to build it in-house?
  - For people you've worked with who have succeeded in this position, what were the things they did day to day that made them stand out?

Common interview mistakes

- Being late
- Not being polite or humble
  - We're asking hard questions because we want to get a sense of your ability
  - It's not because we don't like you!
- Not preparing/regurgitating an answer you don't understand
- Not testing your code
- Not demonstrating your interest
  - Have good questions to ask!
- Be personable!
- Giving up
- Not taking an interviewer's hints or guidance

Making the most of your job

Making the most of your job

- **Communicate**
    - Expectations
    - Keep people up to date
    - Ask the right number of questions at the right time
- Skills to pick up
    - Navigate a large codebase
    - When to ask questions
    - When to escalate
- Watch how other people do it
- Take notes

Final Thoughts

- Learn by doing
- It'll take hard work
- Time is your most valuable asset
- I'm putting together a career guide. Sign up here
  https://forms.gle/q4LsdFAgb6xVdAkq7

Questions?

Additional Slides

How are referrals used?

- The strength and signal of a referral will depend on the size of the company and who is referring you
- Some companies just use it as a quick way to prioritize people for initial review
- Others (especially startups) will start with referrals and networks first before looking at external applications
- A good referral can even tip the scales if you're borderline at interviews
- A lot of companies have referral bonuses

Depth vs Breadth

- Should I learn X?
  - Whatever you enjoy because that's what you're more likely to stick with
- In general, depth is probably going to help you stand out more
  - It's hard to get good at something without taking the time
- I'd rather someone who only does iOS than someone who knows a little bit about 5 random programming languages but has never built anything

Common Career Search mistakes

- Thinking that a good GPA will get you a good job
- Not spending enough time on it
- Trying the same thing over and over again
- Getting too attached to a specific company
  - It's subjective
- Not being open to different things
  - You don't know what you don't know

Behavioral Interviews

- Your interviewer wants to figure out if
  - You have done your research
  - You'd be a good fit for the team (technical + cultural)
- Impress
  - Know the company and mission, strategy, latest news, their flagship engineering efforts
- STAR
  - Situation, Task, Action, Result
- Common questions
  - Why do you want to work here
  - Tell me about a time...

Offers! Now what?

Deciding between multiple offers

- Evaluating an offer
  - Compensation
  - Industry
  - Learning
  - Career trajectory
- Consider where you are in your career
  - It gets harder to take risks as you go on
  - Your final internship can set you up really well for a full-time position
- Leverage your network

Compensation

- Negotiate
  - If you do it politely and respectfully, the worst that will happen is you get what was advertised
  - Companies tend to have some range in what they can offer candidates
    - A higher signing bonus or equity is easier to get than a salary increase
    - There's a lot less flexibility for negotiating for junior roles
  - Use your network and research what's possible
  - It's hard if you don't have alternatives
  - Equity
    - Liquidity, RSU, options, %, vesting, oh my!
- Resources
  - https://haseebq.com/my-ten-rules-for-negotiating-a-job-offer/