Launching Your Career: What I Wish I Knew

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What I'll Cover

- Resumes
- Interviews
- Offers
- Starting the job

Non-Exhaustive List of Career Paths

Software:

- Embedded
- Desktop
- Mobile Apps
- Game
- Web
- UI/UX
- Test
- DevOps
- Security
- Sales
- AI/Machine Learning

Data and Analytics:

- Data Scientist
- Data Analyst
- Database Administrator

Networking and Systems:

- Network Engineer
- Systems Administrator
- IT / Helpdesk

Project Management:

- Project Manager
- Product Manager

Research & Academia

Consulting

Technical Writing

Industries

- Technology Companies
  - Software product development
  - Cloud computing and storage
  - Search engines and web services
  - Social media platforms
  - E-commerce and online marketplaces
- Financial Services
  - Banking and financial institutions
  - Financial technology (FinTech) startups
  - Trading and investment platforms
  - Insurance companies
- Healthcare and Life Sciences
  - Medical software and devices
  - Electronic health records (EHR) systems
  - Bioinformatics and computational biology
  - Pharmaceutical and biotech companies
- Automotive and Transportation
  - Autonomous vehicles and driver assistance systems
  - Connected car technologies
  - Logistics and supply chain management
  - Ride-sharing and mobility services
- Aerospace and Defense
  - Aviation software systems
  - Satellite and space technology
  - Military and defense contractors
- Telecommunications
  - Mobile app development
  - Network infrastructure and security
  - Internet service providers
  - 5G and wireless communication technologies

- Entertainment and Media
  - Video game development
  - Visual effects and animation studios
  - Streaming platforms and content delivery
  - Digital media and publishing
- Retail and Consumer Goods
  - E-commerce platforms
  - Inventory management and logistics
  - Point-of-sale (POS) systems
  - Customer relationship management (CRM) software
- Energy and Utilities
  - Smart grid technologies
  - Renewable energy management systems
  - Oil and gas industry software
- Government and Public Sector
  - E-government services
  - Public transportation systems
  - Smart city initiatives
  - Cybersecurity and national defense
- Education and E-learning
  - Educational software and platforms
  - Online course management systems
  - Curriculum development and assessment tools
- Consulting and Professional Services
  - IT consulting firms
  - Software development agencies
  - Digital transformation consulting

Resume

- There is a lot of conflicting advice on what to put in a resume and how to format it

- Most of that advice is subjective preference masquerading as objective rules

My Objective Resume Rules

- Clear
  - Direct, unambiguous language
  - Be specific

- Concise
  - Short & Punchy
  - Don't put filler

- Consistent
  - The template or format you choose is less important than it being consistent throughout the document.

Resume Strategy: Tailoring

- Tailor your resume to each job you apply to
  - Look at the job description and, *gently* stretch yourself to meet the requirements

- Pro: I'm more likely to respond to a relevant resume

- Con: this takes time and each resume submitted only has a small chance of being responded to let alone result in an interview

Resume Strategy: Spam One Resume

- Write only one resume, apply to as many jobs as possible with it

- Pro: It's a numbers game, so you increase your chance of a hit

- Con: Resume might not be as relevant to the jobs you're applying to as it could be

Resume Strategy: Hybrid

- Mostly spam your resume

- But, also pick a few jobs that are worth the time of tailoring

Cover Letters

- I put 99.9999% of the weight on the resume

- These **almost never** matter
  - Exceptions
    - Career Change
   - Large Employment Gap

Side Projects

- These mainly help when you're just starting out

- Lots of bootcamps make their students do this

- It's something, but real world experience counts way way more

A Heuristic for Judging Experience

- Domain Relevance
  - Have you worked on problems within the same domain?

- # of Teammates
  - How many people have you worked with?

- Tech Relevance
  - Which programming language did you use?

- # of Users
  - How many people used your software?

A Heuristic for Judging Experience
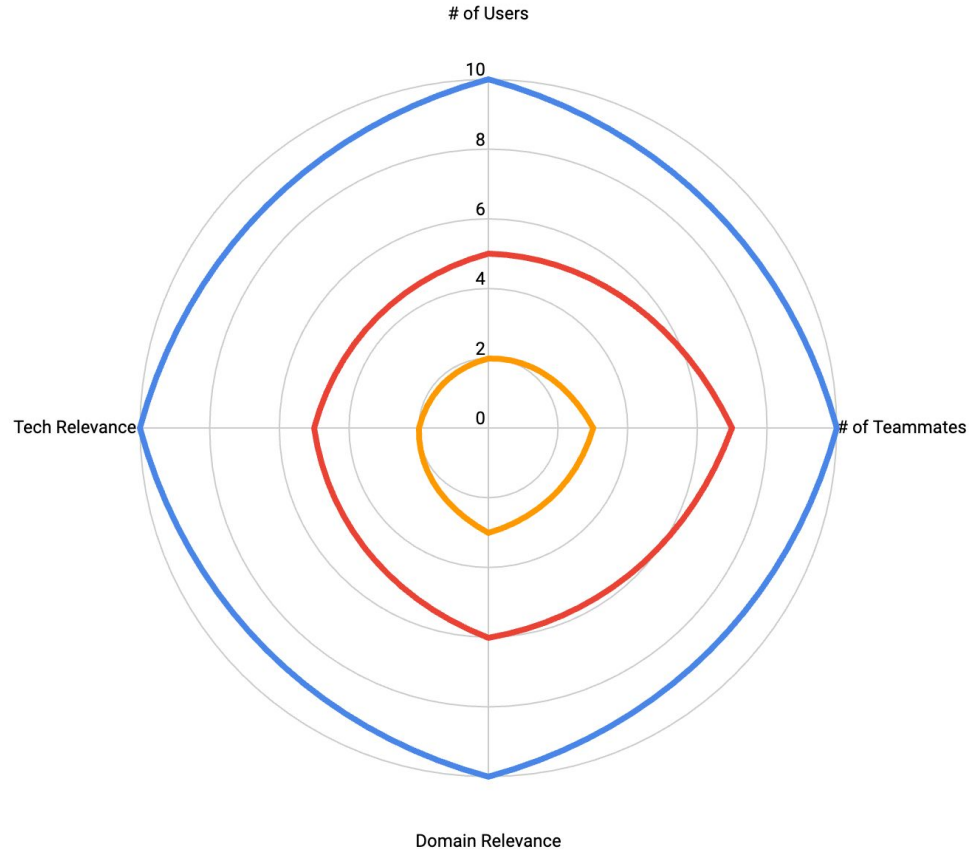
Which Jobs to Apply to

- **All of them**
    - It doesn't cost you much to apply

- **Let them tell you no, don't tell yourself no before you even try**

- **That being said, ideally it's something you're excited about**
    - I can tell when people don't really care about the job/company

- **If a job listing says 1-3 years experience, it might as well say 0**

Best Strategy to get an Interview

- Know someone who works there

- Ideally someone who can actually vouch for you, otherwise it may not be much better than applying on your own

- Reach out to current employees of the company on LinkedIn, start a conversation, ask for them to submit you
  - This used to be unique, now it's popular and can be annoying

- Network
  - Go to meetups, message boards, discords, etc.

Interviews

- Make your first interview **not** be for the job you really want
  - Do some interviews where you feel the freedom to bomb them

- Don't put all your eggs in one basket
  - Interview with as many companies as you can, it never hurts to have several offers

- Practice solving problems on a whiteboard

- Practice interviewing
  - Pramp.com

Prep for Interviews

- leetcode.com

- neetcode.io ← I really like this one

- github.com/jwasham/coding-interview-university

- github.com/donnemartin/system-design-primer *

    * probably safe to skip for entry level jobs

Blind 75

- [75 Leetcode Questions](#)

Leetcode Question Categories

- Arrays & Hashing
- Two Pointers
- Stacks
- Binary Search
- Sliding Window
- Linked Lists
- Trees
- Tries

- Backtracking
- Graphs
- Heaps
- Intervals
- Greedy
- Dynamic Programming
- Bit Manipulation

Interview Prep

amazon.com/Cracking-Coding-Interview-Programming-Questions/dp/0984782850
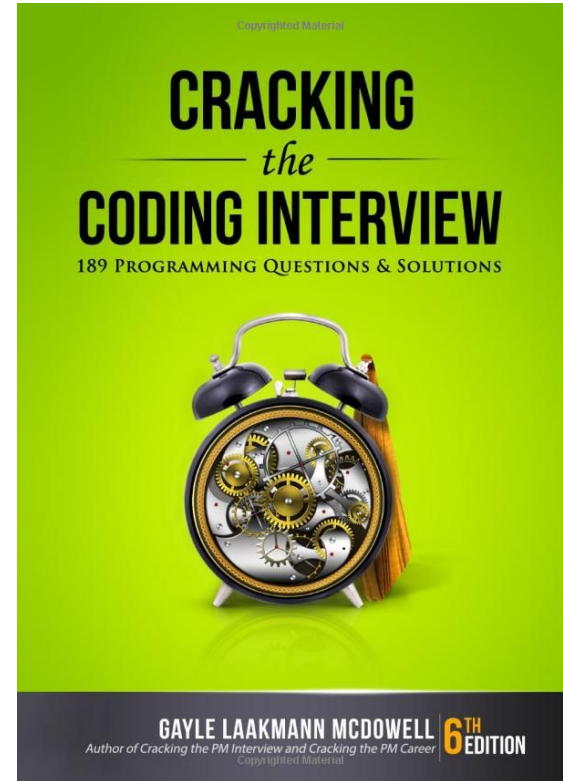
Technical Interviews

- **Practice talking out loud while solving a problem**
  - Getting the answer right is only part of it, they want to know how you approach problems
  - Make even the things that might seem obvious explicit. They want to know that you know.

- **ALWAYS** ask clarifying questions before jumping in
  - They'll often purposefully leave out details, they expect you to ask
  - They want to know if you don't know enough to know that they've left something out
  - Solve the right problem, you don't have time to spend going down the wrong path

- Be open to help from your interviewer
  - Create space for them to interject
  - Get buy in on your approach before diving in

- Even Technical Interviews are an assessment of soft skills
  - I don't care if you can solve the problem if you're difficult to deal with and/or uncoachable

- Sometimes the brute force solution is ok, a working solution is better than nothing

Companies That Don't Whiteboard

- nowhiteboard.org

- github.com/poteto/hiring-without-whiteboards

Most of my Day isn't Coding

- We spend more time figuring out what and how to build something than time spent building

- Soft skills are really important

- Great things are built by great teams

- Great teams have great communication

- Vulnerability is a requirement

Behavioral Interviews

- When answering questions, don't go on and on

- Give punchy, concise answers

- It's great when it flows like a normal conversation

- Give the interviewer a chance to ask follow ups (again, don't go on and on)

- **Confidently** admit when you don't know something

Getting Rejected

- Not getting the job is not a reflection of your worth

- It might be a signal that <u>you haven't prepped enough</u>

- It's really hard to get an accurate sense of a person in a 40-60 minute interview

- We have to make snap decisions on who to hire amongst several candidates
  - You might be really good but another candidate is a better fit

- Interviewers get it wrong all the time

- Everyone knows the way interviews are conducted isn't good, it's just the least bad way we've come up with

Give Interviews

- Being an interviewer allows you to:
    - See what the people who give you a good a sense of their skills are doing
        - And, maybe more importantly, the people who do a bad job

- Practice with peers
    - Take turns being the interviewer and interviewee

"Tiers" of Companies

- The company *can* be less important than the team/manager
  - A bad manager will make you miserable at even the best company

- Reputations aren't always reliable, everyone's experience is unique

- The higher paying the company, the harder it is to get in

  - Smaller startups pay less but they can't be as picky
    - Easier interviews

  - Midsize companies pay more but may be harder to get into

  - FAANG is hard to get into

What language should I learn?

- There's no right answer to this

- Different languages solve different problems, there's no best

- Chasing trends *can* make sense

- IMO: Chase what interests/excites you
  - That's more sustainable

- Going deep can allow you to go wide
  - Once you learn one language really well, you'll be able to pick up others quickly

Where to find jobs

- [Otta](#)

- [Wellfound](#)

- [LinkedIn](#) obviously

- [Indeed](#)

- HackerNews Monthly "Who is hiring?" post, every 1st of the month
  - https://hnhiring.com/

Glassdoor

- Look up companies on Glassdoor
  - Can see salaries, benefits, recent reviews

- *Might* get recent interview questions from there

- Take it with a grain of salt

A place to ask questions

reddit.com/r/cscareerquestions

Salary

levels.fyi
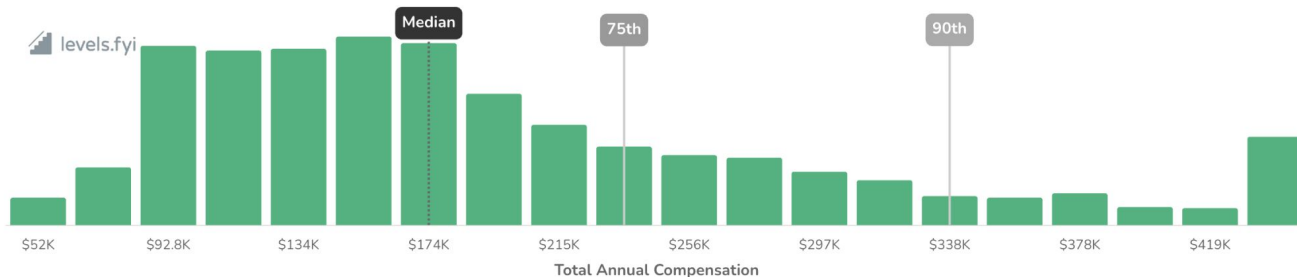
Total Compensation

- Often you won't only be paid a salary, you also get:
  - Bonuses
  - Stock Grants / Options
  - Other Benefits

- Sometimes stock can end up being a majority of your compensation, so don't ignore it

- Publicly traded companies' stock is actually worth something

- Private companies' stock are lotto tickets
  - 90% of startups fail
  - [.00006% chance of becoming a unicorn](#)

Negotiate

- Always

- [Ten Rules for Negotiating a Job Offer](#)

Once you have the job

- **DON'T BE AFRAID TO LOOK STUPID!**

- The fastest way to level up is to embrace the fact that you don't know what you're doing and ask questions.

- The good thing, though, is that no one really knows what they're doing. We're all just figuring it out as we go along.

Computers are not magic

- When you're first starting out, it's like drinking from a firehose.

- But I promise you, there's no magic. [Everything computers can do can be understood](#).

- Start from the assumption that no matter what is in front of you, it can be understood.

- The sense of dread you feel when you hit an error message you haven't seen before or your code has a bug should be replaced with a spirit of curiosity. Because, **no matter what**, it can be understood.

When you're ready, you won't have to

- Once you're past that ~3 year mark, you will be inundated with requests for interviews

- Many of the companies won't be great, but every so often a really good one will come along

☐ ☆ ⟩	**Zayna S.**	recruiters	**Last Call: Join the Stellar Team at OneSignal (Leading Customer Engagement Platform)** - Hi Carlos,
☐ ☆ ⟩	**Lindsey Yarbrough**	recruiters	**Bank of America - EXCLUSIVE Opportunity - Interviews ASAP** - Hi Carlos! I hope you are doing well! I
☐ ☆ ⟩	**Zayna S.**	recruiters	**Join the Stellar Team at OneSignal (Leading Customer Engagement Platform)** - Hi Carlos, Just wante
☐ ☆ ⟩	**Reuben Roth** 2		**Carlos, how long do trees live for?** - Hey Carlos, Gentle reminder to see if you saw my previous email. We're in the
☐ ☆ ⟩	**Shannon Kelly** 3	recruiters	**Help us scale Whatnot! 🚀 Livestream Shopping Marketplace (100% Remote)** - Hey Carlos 👋 My na
☐ ☆ ⟩	**Zayna S.**	recruiters	**Join the Stellar Team at OneSignal (Leading Customer Engagement Platform)** - Hi Carlos, I'm Zayna,
☐ ☆ ⟩	**Nancy Arnold**	recruiters	**I just requested to connect** - Hi Carlos, I'd like to join your LinkedIn network.
☐ ☆ ⟩	**Barbara Lee**	recruiters	**What's next?** - Hey Carlos, WeMod is looking to expand our engineering team with a Lead Backend Engi

Lawrence Gomez   Mar 28, 2023, 2:22 PM ☆

Hey Carlos, Hope you're well. It'd be great to hear about your work with APIs at Etsy. I represent P…

Lawrence Gomez   Thu, Mar 30, 8:24 PM ☆

Hey Carlos, Bumping my message up about Pager to see if you'd like to learn more. They're devel…

Lawrence Gomez   Sun, Apr 2, 12:29 PM ☆

Carlos, Circling back once more with regards to Pager. I'm confident that the hiring team would lov…

Lawrence Gomez   Thu, Apr 6, 8:05 PM (13 days ago) ☆

Hi Carlos, Hope all is well. I suspect things are super busy on your end but I wanted to follow up for…

Lawrence Gomez <lawrence@pager.xyz>   8:14 PM (48 minutes ago)   ☆ ↩ ⋮
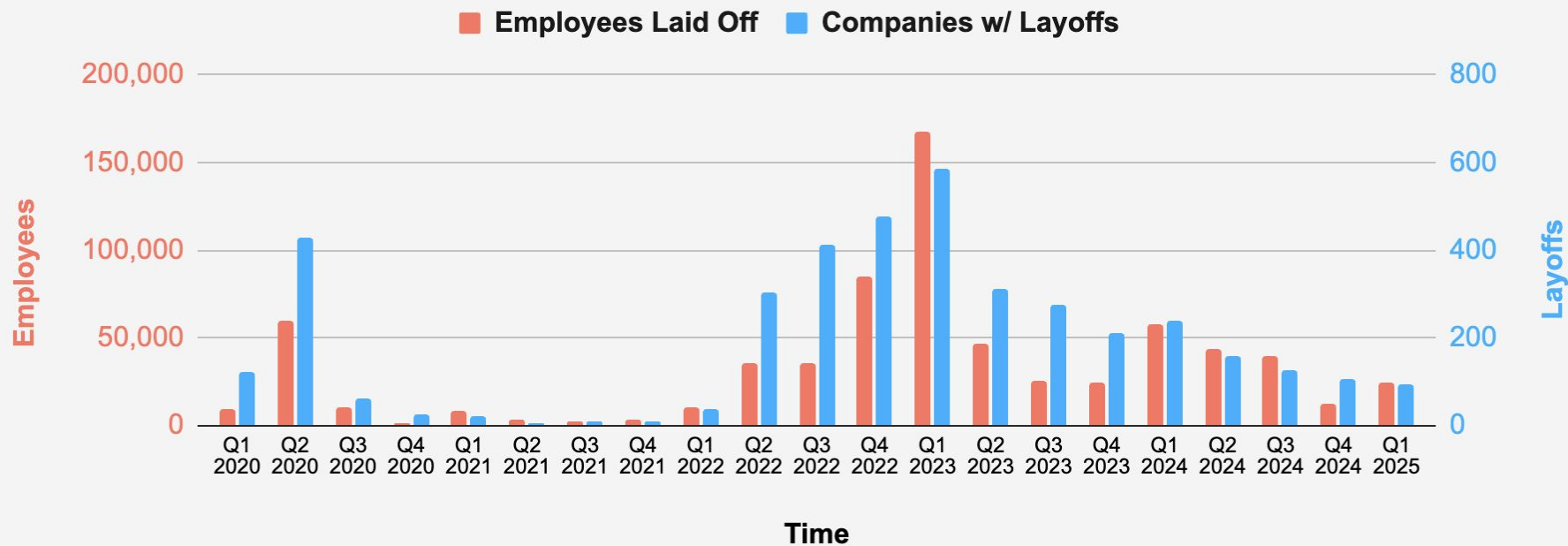
to me ▾

Hey Carlos,

It's been a few weeks since my last email but I wanted to touch base again about Pager since it may not have been the best time before. If you'd like to chat, let me know and we can find some time.

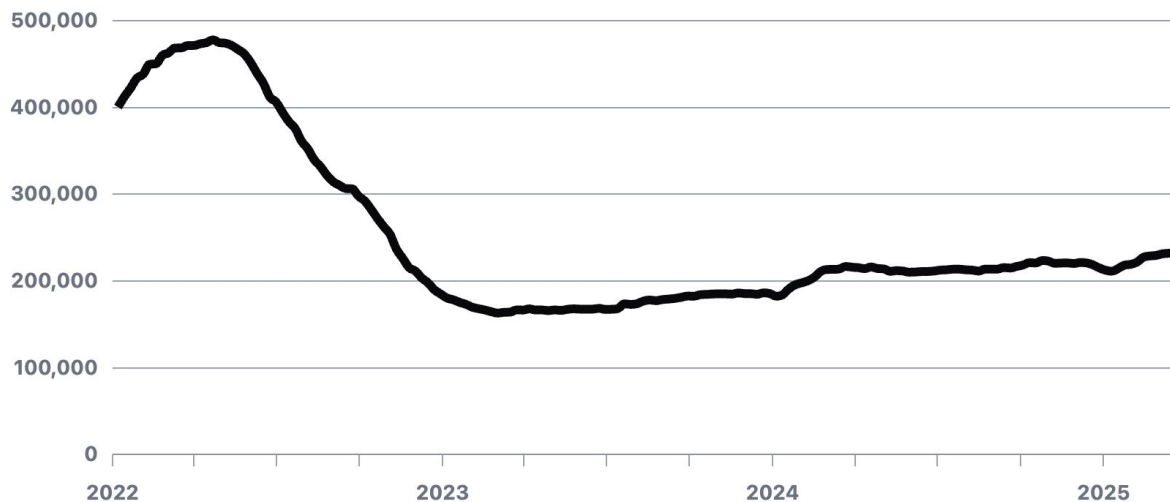# The Job Market is Trash (but getting better)

Tech layoffs since COVID-19

Source: https://layoffs.fyi

But There's Hope

of Open Tech Jobs

Total open jobs at tech startups, tech unicorns, and public tech companies

232,549
As of Mar 21
↓ 51.3% from peak
↑ 42.7% from low

500,000

400,000

300,000

200,000

100,000

0

2022   2023   2024   2025

Source: trueup.io/job-trend

Start Before You're Ready

- Don't wait for the stars to align, just get started

Link to These Slides

carloscuevas.github.io/career.pdf