

Careers in CS

Why Get a Job in CS?

- Median salary for an entry level SWE on levels.fyi is \$119k in NoVA
 - ~2M Software developers in the US with 15%+ growth over 10 years
 - Hard and fulfilling problems to work on
 - The freedom to work when and where you want
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Steve Jobs on Programming

I think one of the things that really separates us from the high primates is that we're tool builders...

I read a study that measured the efficiency of locomotion for various species on the planet. The condor used the least energy to move a kilometer...

And, humans came in with a rather unimpressive showing, about a third of the way down the list...

Continued

But, then somebody at Scientific American had the insight to test the efficiency of locomotion for a man on a bicycle. And, a man on a bicycle, a human on a bicycle, blew the condor away, completely off the top of the charts.

What a computer is to me is it's the most remarkable tool that we've ever come up with, and it's the equivalent of a bicycle for our minds ~ Steve Jobs

The New Reality

Far from Ideal



Figure 1: Squidward Begging for Spare Change

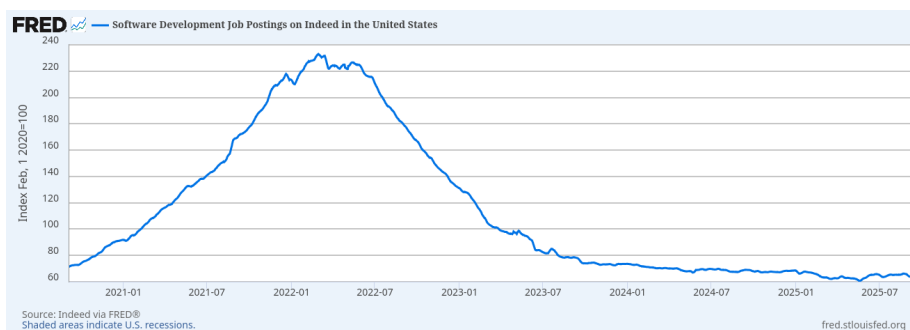


Figure 2: Software Development Job Postings on Indeed

Popular Jobs

- Software Engineer (SWE/SDE)
 - Frontend Engineer (FEE)
 - Mobile Engineer (ME)
 - Backend Engineer (BE)
 - Devops/Software Reliability Engineer (SRE)
 - Security Engineer (SE)
 - Software Engineer in Test (SDET/QA)
 - Verification Engineer (VE)
 - Product Manager (PM)
 - Design
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Picking a role

- Generally SWE jobs are the most popular but also the most diverse in what they test for
 - Targeting these roles as a junior is generally the best, but there are other roles that you might like more
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Getting Interviews

- Referrals are best (use your alumni network)
 - Take internships while in college
 - Talk to companies in the area and see if there are openings
 - Talk to alumni for information on how they got jobs
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Interview process

- Online Assessment (complete a question with multiple layers)
 - Technical Questions (algorithm questions, practical questions, pair programming)
 - Behavioral Questions (tell me about a time when...)
 - System Design (Tell me how you would build X, like Google, FB, Yelp)
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Algorithm Questions

- Solve a small scoped algorithm question like find if a course schedule is valid for a given department
- Leetcode

- NeetCode
 - Daily Coding Problem
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Practical Questions

- Create a transactional bank system
 - Find a bug in a codebase
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System Design

- Design Netflix
 - Design Google Search
 - Design Uber
 - System Design Interview
 - Designing Data-Intensive Applications
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Why listen to me?





zendesk



- I'm self-taught (no bootcamp or education)
 - Worked for over 7 years in multiple jobs including big tech
 - My previous job was a warehouse worker
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Questions?

