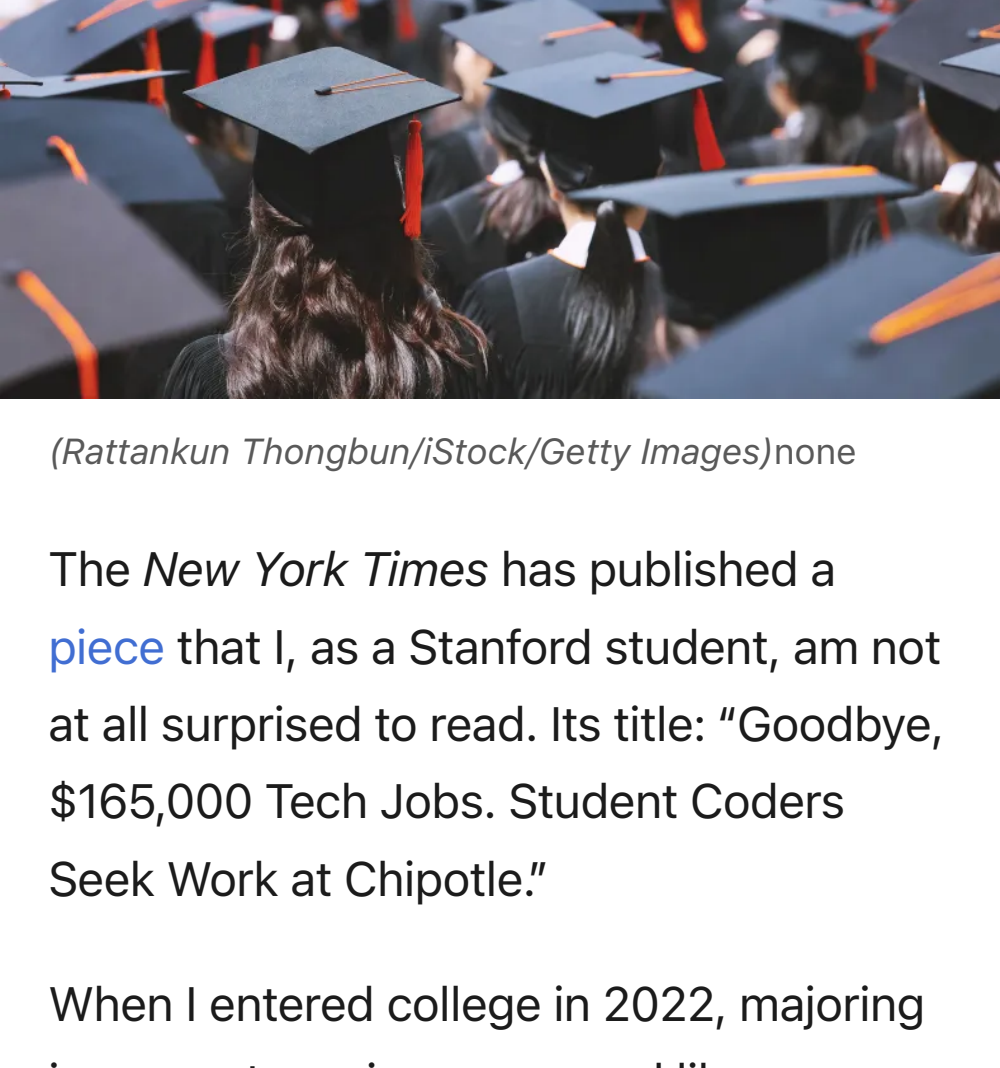


The Tragedy of the Computer Science Major

John R. Puri • August 14, 2025 6:30 AM



(Rattankun Thongbun/iStock/Getty Images)none

The *New York Times* has published a [piece](#) that I, as a Stanford student, am not at all surprised to read. Its title: “Goodbye, \$165,000 Tech Jobs. Student Coders Seek Work at Chipotle.”

When I entered college in 2022, majoring in computer science seemed like a guaranteed ticket to a rich and stable career. Software developers graduating into the Silicon Valley job market were buried in job offers. Making \$300,000 or more right off the bat was a reasonable expectation.

Three years later, the career prospects of computer science graduates — even those from the most elite universities — are stunningly bleak. “Among college graduates ages 22 to 27, computer science and computer engineering majors are facing some of the highest unemployment rates, 6.1 percent and 7.5 percent respectively,” the article notes. “That is more than double the unemployment rate among recent biology and art history graduates, which is just 3 percent.” Let me emphasize, the *art history* kids are finding jobs at a significantly higher rate than the computer science and computer engineering students.

The *Times* says that “more than 150 college students and recent graduates — from state schools including the universities of Maryland, Texas and Washington, as well as private universities like Cornell and Stanford — shared their experiences.” Of these graduates, “some said they had applied to hundreds, and in several cases thousands, of tech jobs at companies, nonprofits and government agencies.” Some? From my interactions with fellow Stanford students, I would say most. Applying to 200 to 300 positions just to receive one offer is the new norm for aspiring software developers.

Generative artificial intelligence, such as ChatGPT — which came out during my freshman year and blew away my genius-level coder roommate — deserves some of the blame for computer science majors’ poor prospects. AI tools have become so good at programming that they can replace most low-level tasks, such as troubleshooting. But even the best AI requires a human mind to guide it with critical thinking and problem-solving. Even if AI could replace mediocre coders entirely, the most advanced computer science students should still be in high demand.

The far bigger problem, I believe, is that an enormous boom in tech investment and tech company valuations in 2021 and 2022, followed by a contraction to more normal levels in 2023 and 2024, created a structural mismatch between the number of open software jobs and the number of graduates ready to fill them. Based on my time in the Silicon Valley area, I cannot put into words how ludicrously frothy the market was. Virtually every software start-up with a cool name and a neat trick could raise tens of millions of dollars. Those who rushed to the public markets raised billions. The average early-stage valuation [doubled](#) in two years, between 2020 and 2022. Global venture capital investment [doubled](#) as well, to \$685 billion in 2021 from \$310 billion the year prior. Money was so plentiful in the Valley that tech firms could [hire](#) at record levels and pay ungodly amounts. With interest rates set at zero and the Fed [injecting](#) trillions of dollars into the financial system, money was essentially free. The tech industry was the greatest beneficiary. Alas, once the period of free money ended, it became the greatest loser.

Since the Federal Reserve raised interest rates and wound down money creation to reduce inflation, the tech industry has fallen way back down to earth. As venture capital investment plummeted, the valuations of the companies it funded collapsed as well. Initial public offerings of tech firms fell off a cliff — 126 companies went public in 2021, and only *nine* in 2023. All that money gushing through Silicon Valley had suddenly dried up. Job openings in tech [declined](#) from a peak of nearly 478,000 in April 2022 to just 163,000 by March 2023. More than 260,000 workers were [laid off](#) from companies such as Amazon, Meta, and Microsoft.

Logically, the number of people seeking jobs in software development should have shrunk. But tens of thousands of college students — enticed by the tech boom’s promise of ample jobs and astronomical salaries — were already deep into their studies. Now, they have begun to graduate en masse into an industry that has no room for them. Relative to a few years ago, there are far fewer jobs in technology and far more computer science graduates who want them. The rapid boom and bust of the tech industry, combined with the four-year lag of a college education, has killed these kids’ chances at getting the career they trained for.

In 2024, says the *Times* article, the number of undergraduates majoring in computer science “topped 170,000 in the United States — more than double the number in 2014.” Most of them chose that degree to work in an industry that no longer exists. One young man whom the *Times* profiles graduated with a computer science degree from Oregon State University. He has applied for 5,762 tech jobs, been invited to 13 interviews, and received zero offers. He is now living at home and receiving unemployment benefits after being rejected from McDonald’s for “lack of experience.”

There are a few lessons here. First, the widespread push in the 2010s for every young person to learn how to code was not prudent. Children vary widely in their aptitudes, and it is nearly impossible to fine-tune one’s career path. Yet even if no parent had ever encouraged his kid to study computer science, tens of thousands of college students would have still been drawn to the field by the 2021 and 2022 job market. That market, however, was an extraordinary economic moment produced by exceptional circumstances. Such moments, just as parents’ ambitions, are not the proper foundation on which to plan a career.

As for my fellow Stanford students, I sincerely believe that many of them who cannot win precious tech jobs could find employment elsewhere. A Stanford computer science graduate could stand above the competition if he or she discovered the unknown world between San Francisco and New York City and “settled” for a position in [IT management](#), or even software [development](#) for a non-tech firm. They would not make as much money as they once assumed they would, sure, but they would still do quite well, and the jobs they really want aren’t there anymore.

Whenever I bring up this alternative career path among Stanford computer science students, they are indignant. Yet the choice before them, increasingly, is between being an unemployed elite software developer or getting a job as anything else.

(Rattankun Thongbun/iStock/Getty Images)none