Juggling academics and work life as a computer science major

ILLUSTRATION: **ZARIF FAIAZ**

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The world of computer science, as saturated as it is, still allures fresh faces by the minute. When everything in the world, starting from toasters all the way to toilet seats, is going through some sort of technological overhaul, it's no wonder why the field is an ever-growing beehive. The usual roadmap is to go through the motions of a degree, choosing a specialisation in the final year, and then opting to conduct thesis work or land an internship. It's an age-old blueprint that's been tried and tested.

There is a catch, however. Whereas universities abroad provide co-op, where the institution itself facilitates the placement of students in alternating full-time work periods – the responsibility of obtaining an internship in Bangladesh often falls solely on the student. Nonetheless, there are those proactive bunch that choose to go against the grain, building marketable skills early on, in order to beat the curve and short-circuit their way to the industry.

Building up to be marketable

"For some context, I have been programming since class 7 and by the time I got my first job in March 2022, I was already working as a freelancer. And I enrolled in BRACU that very fall," said Imran Rahman, a part-time full-stack developer at TechSpire Ltd.

"First off, you need raw hard skills," emphasised Imran, stressing the importance of actual technical know-how. "Since I've already had some experience in programming, all I needed to do is to apply those skills to learn a backend framework, Django in my case, build some rock solid projects, and cross my fingers."

The focus on technical prowess is highlighted by North South University student Khan Asfi Reza, who works as a Lead Backend Engineer at Zelf Technologies. As Reza notes, "A student should first focus on learning the basics, gradually improving, and applying that knowledge in real-world scenarios."

"Creating an online presence is equally important, whether by working on projects, or participating in hackathons and competitions. Contributing to open-source projects and engaging in competitive programming can give a career boost," said Asfi highlighting the multiple pathways of building a portfolio.

"The ability to speak English properly and without any mistakes is a must," added Zobaer Ibn Razzaque, Operations Manager of Ontik Technology and a student of United International University. But we only have so many waking hours. "Time management skills are paramount. You cannot go with the flow for the long haul," stressed all three with equal fervour.

Making the landing

"By the time I got my first job, I was 250-300 applications deep. I was simply applying to any job on LinkedIn that matched my skill set. I was lucky enough to get a reply from a CTO of a company," Imran explained regarding the factor of luck in applications.

"During the interview, we mostly talked about my previous experience, before moving on to some technical questions related to Django and system design. And then we negotiated about work hours, I was expected to work 20 hours a week," continued Imran.

On the other hand, Asfi was starting out from a different vantage point. "Beginners should start networking through LinkedIn, reaching out via cold emails, or exploring freelance platforms like Fiverr and Upwork. I started working as a freelance web developer on Fiverr and Upwork in 2020, which helped me build my online presence, and improve my GitHub profile. That's what played a key role in landing a job at Zelf."

But aspirants need not feel limited to just LinkedIn applications or cold emails for there is a much simpler method that stood the test of time: networking with alumni. "One of the company's owners is my school alumni; he is like a mentor to me. I discussed with him my passion for team leading and having my work have an impact on people's lives," Zobaer revealed. "Through him, I joined my current workplace as an operations intern and fast forward about 1.5 years; here I am."

Managing academic workload

Balancing work life and a full course load is as cumbersome as it sounds, and that's without factoring in the labyrinthine maze to be navigated, that is Dhaka's traffic. But you might just not need to.

"My boss is kind enough to grant me remote work, with a flexible schedule which makes it a lot easier since I don't have to commute," commented Imran about the nature of his job. "I can also take days off when I have exams, although I end up having to pull one too many all-nighters. On the flip side, work also gets affected when there's a little too much going on at university, which could definitely leave a lasting mark on your professional track record."

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"I have a very close group of friends, and I just read the notes they prepare before exams. Having great friends at university is not a joke," responded Zobaer on the topic of balancing work-study.

Or if push comes to shove, strictly compartmentalise your study hours to the weekends. "I usually focus on studying during weekends. During exams, I try to complete my job tasks early so I can dedicate time to studying, "I usually take my classes in the early morning and finish by 1-2 PM, which gives me time to work the rest of the day," explained Asfi.

With great power comes great responsibility

While a steady paycheck and an invaluable addition to your resume are all very attractive prospects, maintaining a corporate job is no walk in the park. As Imran put it aptly, "It's important to understand that your code is important and there are people who depend on it."

The aforementioned raw skills will be put to the test often when working day-to-day. "My responsibilities include designing and architecting solutions using the cloud, developing services to analyse and process data, creating API endpoints and managing continuous integration and deployment," said Asfi.

For those opting for non-IT sectors, communication and project management skills will be at the forefront. "Everything from closing deals to project support, delivery handling and client support keeps me occupied. There are days I find myself doing 7-8, often consecutive, meetings," Zobaer elaborated.

Sacrifices to be made

It's not all fun and games, there are genuine sacrifices to be made when taking on a lifestyle this occupies. "It often means sacrificing sleep. There have been times when I missed classes due to work, forcing me to catch up on the syllabus later," said Asfi, shedding light on the frustrating reality.

"To follow this route, you need a lot of patience and grit. You will have to make sacrifices, especially regarding social life," said Imran while Zobaer stressed the same point, "The greatest sacrifice was my leisure time that I could have spent with family or friends. There can be weeks in a stretch where I am gone for the entire day." Yet Zobaer remains aware that all good things come at a cost. "These are steps that I knowingly took to start my career early on and explore what I am capable of."
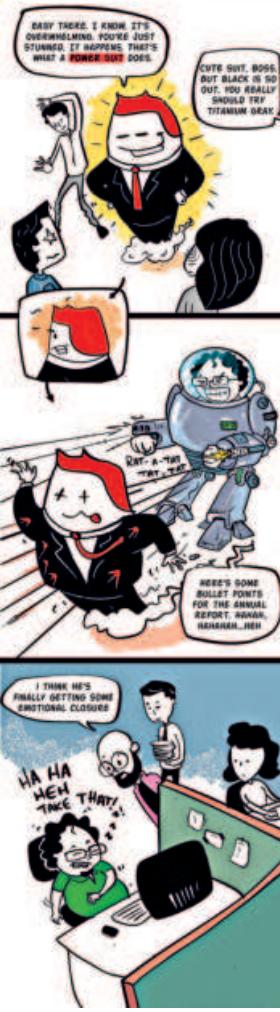
> "Lock up your libraries if you like; but there is no gate, no lock, no bolt that you can set upon the freedom of my mind."
>
> **VIRGINIA WOOLF**

Turing Award winner Yoshua Bengio launches AI safety lab

THE BOSSMAN
BY E. RAZA RONNY

NEXT STEP DESK

Yoshua Bengio, a leading figure in artificial intelligence and a 2018 Turing Award winner, has launched LawZero, a nonprofit lab focused on making AI safer for humanity. Speaking to the Financial Times this month, Bengio revealed that LawZero aims to tackle the growing risks associated with powerful AI systems by prioritising safety and ethical development.

According to a report by TechCrunch on the matter, Bengio's lab has raised $30 million from high-profile supporters such as Skype co-founder Jaan Tallinn, former Google CEO Eric Schmidt, Open Philanthropy, and the Future of Life Institute. Its name, LawZero, draws inspiration from the Zeroth Law of Robotics - a fictional rule that places humanity's welfare above all else.

Often called one of the "godfathers" of modern AI, Bengio has become an outspoken voice on AI safety, supporting legislative efforts like California's SB 1047, which seeks to prevent AI systems from causing large-scale harm. Yet he remains wary of major tech companies like OpenAI and Google, doubting their willingness to prioritise safety in the rush to develop increasingly advanced AI.

This company introduced a hotline for calling its CEO's AI clone

NEXT STEP DESK

Klarna, a Swedish fintech company, has recently launched an artificial intelligence-powered hotline allowing users to provide feedback directly to a virtual version of its CEO and co-founder, Sebastian Siemiatkowski.

According to a recent statement from the company, the service enables customers and merchants to call a phone line and speak to a digital replica of Sebastian Siemiatkowski trained on his voice, insights, and experiences. The AI CEO is programmed to respond to questions about Klarna's products, vision, and founding story, and encourages callers to offer feedback on their experiences with the platform.

Once a call is completed, Klarna says a transcript and summary are automatically generated using a large language model (LLM). These insights are then fed into an internal dashboard used by the company's product and engineering teams to assess potential improvements. Klarna claims the process allows for feedback to be acted upon quickly, with the possibility of product changes being made as soon as the following day.

The hotline is currently accessible via phone numbers in the United States (+14246675385), and Sweden, (+46852512594). The initiative follows previous uses of generative AI by Siemiatkowski, including deploying an AI version of himself to present company earnings reports.

Meta invests $14.8 bln in Scale AI, hires its 28-year-old CEO

NEXT STEP DESK

Meta, the parent company of Facebook, has invested $14.8 billion in Scale AI, a data-labeling startup, in a deal that values the company at $29 billion. As part of the agreement, Scale AI's 28-year-old CEO, Alexandr Wang, will step down to join Meta's artificial intelligence (AI) initiatives. The deal gives Meta a 49% nonvoting stake in Scale AI but does not include a board seat or control over the startup.

Scale AI specialises in labelling data used to train AI models, working with major tech firms, including Microsoft and OpenAI. Wang, a college dropout who co-founded Scale AI in 2016, quickly rose to prominence in Silicon Valley, turning the company into a key player in AI development. His move to Meta signals CEO Mark Zuckerberg's push to strengthen the company's AI capabilities after setbacks in open-source AI development.

The deal is Meta's second-largest investment ever, behind its $19 billion acquisition of WhatsApp in 2014. While it provides a lucrative exit for early investors in Scale AI, questions remain about how other AI companies will react. Some may reduce their reliance on Scale AI's services due to concerns about Meta gaining indirect insights into their operations.