How CSE can shape your career

SOFIA NOOR RAFA

COMPUTER Science and Engineering (CSE) is one of the most lucrative subjects among the engineering disciplines of the world right now. The subject became the first choice rapidly for many high-school graduates who wanted a career in computational technology. Seemingly, one might think that this discipline deals with computation primarily. Nevertheless, the field of CSE is a widely diversified one; it is ever-changing. The subject has been expanding since its inception as a separate subject to study at universities.

How is it to graduate from this field and have a career? Moreover, is the quality of studying CSE in Bangladesh only limited to the public universities offering a degree in CSE? Not so!

East West University (EWU), Dhaka, started its journey as a private university in Bangladesh in 1996. Here are three EWU graduates majoring in CSE who have shared their insights on the subject and career.

Perception of a software engineer: Sabit Faisal Dipto is currently working as a software engineer at Human Resocia, a Japanese platform that welcomes engineers from more than 30 countries. He has managed to pull off his software engineering skills and is now enjoying the privileges of an international career. How did he do that?

"Programming," he answered. Programming skills are necessary. He went on to explain more. Problem-solving, self-motivation and adaptability are the qualities that any successful software engineer requires.

"I started developing projects on my own. Problem-solving is something I still do to build my logic. I would suggest everyone to solve problems regularly. Use samples from 'Cracking The Coding Interview' book to learn more about frequently-needed algorithms and start practicing from it. One CSE student can find enough resources from the internet," he added.

Why should CSE be a choice? "The subject has a wide range of acceptance throughout the world currently. Every university offers a CS/CSE degree. CSE has paved the way for a polynomial growth, a growth that is welcoming the technological change, opening up chances to do freelancing, and offering a high-

Sabit Faisal Dipto, software engineer at Human Resocia, Japan

range salary in the job sector," said Sabit.

Is it guaranteed that studying CSE would ensure a great career? "Decision-making and timing are the factors here. I came to Japan because of the country's demand for software engineers. Adaptability is essential for a career in technology." He added that he found inspiration for his work from the famous Bruce Lee quote, "Empty your mind, be formless. Shapeless, like water."

Visions of a magna cum laude graduate: Rifat Mehreen Amin, a graduate student of Data Science at Ludwig Maximilian University of Munich (LMU Munich), one of the most prestigious universities in Europe, spoke of her liking towards courses that made her go for data science. She graduated with distinctions from East West University in December 2017. She then worked as a Graduate Teaching Assistant at East West University from January 2018 to September 2018.

Studying a technical subject doesn't always imply that things would go according to plan. What if someone wanted to become an academic? "It depends. If someone wants to learn, it is always great to take time and explore while studying for a degree," she stated. A degree at a foreign university depends on personal choices, results, qualifications, and willingness, so she thought.

Rifat Mehreen Amin, graduate student at LMU Munich

"I particularly liked doing courses on Artificial Intelligence, Machine Learning, and Data Mining," she said. These courses shaped her attitude to diving deep into data science. "Impactful research that can share industrial insights is possible to produce here at LMU," she further added.

A career in Data Science? Why? "Money," replied a humorous Rifat. "Alongside statistical analysis, linear algebra is also vastly important to become a data scientist," she said.

"If you have a desire to learn from scratch, come for a degree in your suitable place. I think Germany is that place for me," she mentioned.

A piece of advice she would give? "You should be a stickler for your plans. If you choose academics, stay in that way. If you like development, coding, start programming and keep on programming. Regardless of whatever you choose, academia or industry, coding is inevitable," she added.

Insights of another software engineer: Apon Shaha, a software engineer at Human Resocia, Japan, spoke of solving problems based on topics in response to a sustainable practice that is helpful for a CSE undergraduate student. "Gather ideas on the frequently used algorithms; it will help in the long run of problem-solving," he said. "Topic-based problem solving is a blessing in disguise."

Apon Saha, software engineer at Human Resocia, Japan

How to look for a job? "Friends can help on many kinds of stuff, including career opportunities. Networking is the key. During the undergraduate period, it is important to build connections," Apon answered. "There are many friendly and helpful teachers at the department of CSE at the university. They are well-qualified, and they have deep knowledge about the industry. They can lead if anyone is in need," he added.

Is software engineering a lucrative career? an optimistic Apon replied, "I think there are a lot more options than just software engineering if you are qualified enough for software engineering. You can go for app development, frontend, full-stack, security-- anything you prefer, but you need the right skillset. Decide your way and work on it from your student life."

A piece of advice he would give out? "A knack for exploring stuff on your own is key. Start building projects on your own at least from the second year; this will eventually build up a sturdy level of confidence in you," Apon said.

Getting involved in CS-based research is a unique exploration, according to Mr Saha. "I think research is a scope to learn something new. A practical experience is better than anything else. Working with qualified teachers is something to cherish," he added.

sofiautilitarian@gmail.com