

Cumulative Reflection

My years at Iowa State have been the best part of my life. I've made great friends from very diverse backgrounds. I've learned new ways of thinking and problem solving. Most importantly, Iowa State taught me the importance of lifelong learning.

The Computer engineering program made me knowledgeable about both hardware and software as well as security aspects of computers, which gave me an edge as a software engineer. Having a good understanding in Operating Systems (this is what bonds hardware and software together), low-level memory management, process management, network security and distributed computing is very important in developing efficient and secure software as well as analyzing big data.

The coursework in computer engineering is heavily team oriented. Initially, I didn't like the idea of team projects because I thought I could do tasks better. Eventually, I learned that I cannot finish longer and complex projects alone and that I learn much more by interacting with peers from diverse backgrounds. Working on a team is a huge part of engineering in the real world. The coursework helped me grow in terms of working effectively in a team. The hackathons, programming competitions, and cyber defense competitions that I have participated at Iowa State also helped me to become a good team player.

For me, a lot of my real-world experience in software engineering comes from working as an undergraduate research assistant. I've worked on several research opportunities but the biggest was my work at Vollbrecht Lab. I developed a bioinformatics web application with a PhD student. Undergraduate research exposed me to a range of different technologies and their effective applications. This experience helped me to gain confidence in developing complex software systems and to prepare myself for industry.

If I were to redo my undergraduate degree, I don't have many regrets. However, One regret would be that I should have minored in Chinese. It was the last semester that I took a Chinese class just for fun and I discovered a joy of studying Chinese and being able to communicate in Chinese. If I started taking Chinese classes earlier, I wouldn't have to worry about conflicts with computer engineering classes that are necessary to graduate and I could have minored in Chinese. I also could have also been able to study in China for the summer. I was invited by the Chinese professor but I didn't do it because from a career perspective, doing internship in the tech sector during summer is more important for me as a software engineer.

My time spent at Iowa State with friends and the academic experience I gained from attending Iowa State are great treasures in my life.