

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.

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.

Coursework in computer engineering is heavily team oriented. I initially didn't like the idea of team projects because I thought I could do tasks better. I eventually learned that I cannot finish big and complex projects alone and 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 to work 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 a undergraduate research assistant. I've done and presented several research projects 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 how to apply them effectively. This experience helped me to develop confidence in developing complex software systems and to prepare for industry.

If I were to redo my undergraduate degree, I don't have much to regret. However, I regret that I should have minored in Chinese. It was the last semester that I took 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 didn't have to worry about conflicts with computer engineering classes necessary to graduate and I could minor in Chinese. I could have also been able to study in Chinese for summer. I was invited by the Chinese professor but I didn't apply for because from tech career perspective, doing internship in tech sector during summer is more important for me as a software engineer. But other than this, I don't have much and the friends and experience I gained at Iowa State is a great treasure of my life.