

A Cumulative Reflection of Iowa State University

When I first came into college, I wanted to find what field I wanted to go into for my career. I didn't have anything I was super passionate about, only a small interest in computers. My initial goal was to find something I was interested in by taking a diverse array of courses to see what stuck out to me, with a longer-term goal of hopefully finding my interest and creating a career in it. Iowa State University helped me explore and find my passion for computer engineering and laid the foundation for my future career.

Due to this initial indecision, I chose the newest, shiniest major at ISU, Biomedical Engineering. After a semester, I realized that I didn't enjoy science as much as other fields, so I decided to switch to computer engineering during the second semester, while also taking a mechanical engineering SolidWorks class. I've always been interested in computers, but I wasn't sure I wanted to go into the field. My first technical classes were during my second semester at ISU: CPR E 161X, an introductory C class, and a SolidWorks class. CPR E 161X was the first time I ever wrote a single line of code, and it was surprisingly easy, but later became difficult as complexity increased. This was also true for SolidWorks, but with the help of my friends, peers, and a slight interest in writing code, I decided to stick to the path of computer engineering.

During my third semester of college, I got more technical. My classes included COMS 228 (intro to data structures), CPRE 281 (digital logic), and EE 201 (Electrical Circuits). This semester was when I was able to fully explore the technical aspects of computer engineering. These classes exposed me to all the different sides of what being a computer engineer could entail, including the software, hardware, and electrical sides. I found all 3 paths interesting, but this field was something that I enjoyed.

During winter break and the fourth semester of college, I found something I was really interested in: full-stack web development. I initially learned primarily through YouTube videos and online resources, but once the fourth semester started, I was also at university. This semester was my favorite, as it included my two favorite courses: COMS 309 (software development practices) and SE 319 (construction of user interfaces). These courses are the two where I've learned the most about software development, working in teams, and the process in general. COMS 319 was a web development class I enjoyed as this is where my interest lies. COMS 309 was the most interesting and enjoyable class I've taken at ISU so far. It included a semester-long team project and sprint-like demos. I learned a lot about git, CI/CD, working in teams, and the entire process. The reason why I enjoyed this course so much is that the things we learned were directly applicable to future jobs.

During this semester, I also leveraged school resources such as Engineering Career Services to get my resume reviewed, pizza with engineering professionals, and the career fair to get used to talking to employers. Although I didn't get an internship from these two sources, I did get one by mass-applying through Cyhire, another ISU resource. During this internship, I learned more about working in a team, scrum, and making many decisions based on trade-offs. I was also able to work as an actual software engineer, shipping features, catching bugs, and making decisions.

The next semester was a lot more technical. I took multiple notoriously difficult courses, so I didn't have much time for anything outside of schoolwork, though I did attend the career fair and landed an internship. This brings us to the current semester, when I plan to build out my apps further and learn more about cloud platforms. During my time at ISU, I built a strong foundation to jumpstart my career in technology through multiple experiences and projects.