

### **Cumulative Reflection**

Over the past few years of my college experience, I feel as if Iowa State has given me the perspective that for the kinds of goals I want to achieve, I have to work harder than I ever have before. I learned what my values were, how they have changed to what they are, and what steps I need to take to bring my values into everything that I do. Iowa state has presented me with information, to which I now have a fair level of understanding, and taken me through a journey of solving problems that require an application of this information in ways that can be tools to use for future engineering problem-solving. In order for me to design systems of specific functionality, I have to understand how to be a person, how to know how other people work, and how to then create solutions that incorporate technical knowledge to achieve this. This department does this through providing students with lab components to the large majority of technical classes offered. In these labs, we're presented with prompts of tasks to do, as well as instructions of how to use various tools to execute these tasks. Different labs provide different skill sets, but as you progress, it's less about learning how to use the tools and more about approaching a problem and using them. Final projects are a great example of what a task in the industry may provide you with. You have an idea of what you want to do, but now it's about developing problem-solving methods to carry this out, and we use these software and lab equipment that is also used in industry to do this.

These final projects are often done in pairings or groups towards the ends of the semester for the course. This is yet another example of how Iowa State has given us opportunities to exercise the incredibly valuable tool of teamwork. Henry Ford once said, "If everyone is moving forward together, then success takes care of itself." This quote has proven its validity throughout my years at Iowa State through the strong push towards building

communities and collaboration with peers. It's what makes me feel at home and comfortable with working on a team in my summers as an intern in a group of full-time employees. I get to understand how others see a problem and what solutions first come to their mind, and bouncing ideas off of one another is really important for creating our best solution. This also allows me to better understand bigger goals and higher visions, as well as professional and ethical responsibilities. Sometimes, by ourselves, we may not remember what lines cannot be crossed, but together, similar to a government, teams have checks and balancing systems. Iowa State also has professors who emphasize the importance of academic dishonesty and plagiarism. This further enforces what it's like to be in a professional setting and remembering what constitutes as plagiarism and lines for intellectual property, and the ethics behind this.

While collaborating with my peers, resources that proved to be the most helpful included the ability to use the numerous laboratories and open spaces at any time in the day which was not pre-scheduled for a class section. This was great for meeting with my peers on homework, labs, or exam reviews. Another important resource included the ability to reserve rooms in the library for more closed in spaces for meetings. This is especially helpful for senior design as it is often difficult to find a private space with some sort of noise isolation from the public crowd.

Outside of the above resources, one great part of being at Iowa State included the different clubs that I took part in the first few years of my college experience, including emerging leaders in engineering. I made a lot of great friends in this, as well as carried out with some great community outreach and charity work. It reminded me that my limitations for helping society and learning could expand further than my field and my group of peers.

Along with clubs, outside of the classroom, engineering career services has been an extraordinary resource for helping me get my internship, through the career fair, as well as resume building workshops. This resource is what lead me to be able to obtain my first

internship with a company I fell in love with. The internship taught me so many things that I wasn't learning in the classroom, and because of ECS, I wouldn't have had this opportunity to learn and experience more than what a textbook or one semester could have taught me. I remembered why learning has always been my bigger focus, and I will not take for granted the fact that Iowa State is to thank for this.

One of the most impactful parts of my college career includes my involvement with the peer mentoring program, focused on students in the introduction to problem-solving 1 course, EE 185. In this program, I introduced lab topics for a majority-freshman student based class and facilitated their learning in the exploration of various fields in Electrical Engineering. Specifically, I helped students with troubleshooting their problems through a process of asking questions. This was to allow the students to understand how to solve their problems, explore topics deeper on their own, and support their curiosity in the cases that they want to create their own projects. The experience served as a constant reminder of what it was like to first enter college and to keep the spark of curiosity alive throughout my learning, leading me to ask myself to look deeper than the given material in class and better understand concepts. It also challenged me to look at concepts that I have learned from different perspectives, and empathize with my peers by exercising the action of looking at problems from various perspectives. The mentorship itself values a different outlook on education and learning, and it pushed me to see past my schooling and see what problems I can see and solve in my life, and in other contexts outside of my culture. We constantly are making connections with our academic life, personal life, cultural backgrounds and upbringings, and the current world around us, guiding us to take a critical look at the world we live in, and what we are going to contribute to the problems we all face.

It is with this, that I feel that my time at Iowa State has been well supported in my journey of growth. I feel confident in my transition from student life to work life that I can be a positive contributor to the society that I live in, the future of the field of technology, my peers, and myself.