

Iowa State University has given me the opportunity to take many classes that have helped me develop my engineering skills. Collaborative coding, version control, problem solving, and project management are just some of those skills that have been focused on in the classes I have taken during my time here.

My learning experience at Iowa State actually started before I attended school here in 2016. In high school I did a summer OPPTAG program for computer engineering that allowed me to program an Arduino Esplora. Programming those microcontrollers sparked my interest in embedded systems that I further pursued in attending ISU through CPRE 185 and CPRE 288. My interest in embedded systems then led me to gaining the skills of properly reading datasheets and interrupt handling. Those skills have helped me in both my personal life and work life.

In my own life I often program various Arduino microcontrollers to control LEDs and audio equipment for my own projects. I have to read datasheet for the pinouts of various sensors that I have used which is a skill I refined in CPRE 288. The other skill that was pushed in CPRE 288 was how to handle interrupts. I do not use interrupts very often in my personal projects, but when I had a co-op with Western Digital, they were a large portion of my coding experience. While working at Western Digital I wrote firmware for a robot. Again, I used datasheets for various sensors that this robot had, but I also used interrupt handling to get the robot to move in a certain way once I got the proper reading from those sensors. It was almost like I was back in CPRE 288 programming the IR and Ping sensors on the little Rumba.

I often tell potential students looking at Computer Engineering about CPRE 288 and how it helped shape what my interests and skills are. They really enjoy hearing about how it has helped me professionally and personally, so I know that it is a class that is done correctly at Iowa State. I think that even now, two years later, I could still learn more from that class for my own personal projects, but it definitely started a passion for programming that I intend to follow in the future.