

In my personal opinion, ECE engineer is to finish the computer or electrical design of a specific product. To fulfill this requirement, ECE engineer has to learn the basic electrical design methods. Also, they have to maintain a pretty good communication skill because they have to work together to finish a job. Teamwork will be more efficient for electrical design. Before I join in Purdue ECE department, I do not have a complete thinking about the ECE engineer. However, with taking more and more technical courses and participating more and more researches, a general idea is showing in my mind. Some computer engineers are going to create. Create the new products, now technologies to change human being's life. This idea is mainly coming from my advisor Prof. Lu. Because one day, when we talk about the admission rate and graduation rate of top universities, Prof. Lu told me his experience. He said, for example, the pass rate for ECE 264 course is pretty low in several years ago. Around thirty to forty percent students would get Failure for that course. That was not good, he said, because we need so many computer engineers in every where. A creative engineer or designer can lead a bunch of other engineers to design a brand new product to change human's life.

A lot of experiences have contributed to my understanding of what it means to be an ECE engineer. I took a lot of ECE courses and also participated several researches. I have acquired strong knowledge of basic computer architecture from the Computer Engineering major. In my sophomore year, I started to work with Prof. Raji Sundararajan and found that my life goal is to excel at Computer Science algorithms. I worked with Prof. Raji Sundararajan to write a MATLAB program to diagnose diabetic retinopathy images. Based on the results, we developed an Android App which can take and diagnose diabetic retinopathy images and give the feedback to the patients. Because of that, I become more on computer part. At that time, I decided to pursue dual majors in Computer Engineering and MACS (mathematics with computer science) in four years. My interest in Computer is to enhance the efficiency of algorithms. I have worked toward this interest by leading Purdue ACCESS research team, serving as undergraduate research assistant in several projects, and using four years to pursue both computer engineering and mathematics majors. I have obtained a profound background in basic computational method and algorithms from MACS major. The knowledge helps me to understand algorithms related to computers. Moreover, I am taking a master's level computational method course which even drives me more to pursue a master's degree since it is so fascinating and interests me further in this subject.

My understanding of what it means to be an ECE engineer influence a lot my career plans. As I already stated in the first paragraph, when I worked with Prof. Lu, his idea influenced my understanding of ECE engineers a lot. At that time, I become to be a more creative-thinker. Also, I start to think that I should go to graduate school to figure out what I really want, but not directly dive into industry. So, last several months I applied to top ten computer science programs and got accepted into Georgia Tech and UC San Diego. Hope I can have a clear understanding of computer engineer when I finish my master's degree.