

Jack Potter
CprE 494 Cumulative Reflection

Over the course of my education at Iowa State, I've taken a great variety of classes and been involved in numerous activities that have helped prepare me for my future as a cybersecurity engineer. My experiences throughout my collegiate career have been widely varied, with some classes vital to my success in my chosen field and others that have been somewhat less significant. However, one common thread between all of my classes is a clear importance for self-directed learning for overcoming obstacles.

Classes in cybersecurity engineering and information assurance have by and large been the defining factors of my college education. Classes such as Computer Engineering 230/231/331 with Dr. Julie Rursch were instrumental in building a strong foundation in network infrastructure and security. An important aspect of these classes was the hands-on nature of the labs that made up the bulk of the courses. Being dropped in to a virtualized corporate environment and left to find ways to escalate privileges and move laterally throughout the network required me to develop an understanding of and respect for self-directed research through the Linux manual pages among other great sources of information. This has not only improved my performance in class, but allowed me to efficiently solve problems while on my internships. Other security and networking classes, such as Dr. Doug Jacobson's Information Assurance 530/532 courses, have given me a much better understanding of the networking technologies that underpin every aspect of modern society.

Another very important aspect of my time at Iowa State has been the Cyber Defense Competitions held by the ISEAGE research lab. These competitions have regularly given me more hands-on experience with everything from secure coding to network infrastructure to radio technologies over the span of a weekend than most of my lab courses were able to do in a semester. The CDCs have provided me many invaluable experiences every semester of my college career, starting fall of my freshman year when I barely understood what I was doing to spring of my senior year when I accepted the first place trophy at the national competition for the second year in a row.

Other classes outside of cybersecurity have played an important role in my education, though much of it is less directly applicable to my chosen field. For example, I had multiple classes on embedded systems programming and processor design. Neither of these are fields in which I intend to work, however, they've given me a good foundation of knowledge upon which I may go forth and continue to learn more throughout my entire life.

In general, I have had a positive experience with my schoolwork and my extracurricular activities over the past four years. I'm excited to graduate so that I may begin applying my newly

developed skills and knowledge out in the real world, though it will be somewhat bittersweet to leave the university where I've had so many opportunities to grow and develop as a person.