

Introduction

During my time at Old Dominion University I have been able to learn and further develop a wide set of technical skills and analytical thinking while studying cybersecurity. Cybersecurity exposed me to a wide range of topics such as networking, system security and vulnerability analysis. Throughout this program I have been able to learn how technical systems operate and how they can be protected from cyber threats. I have also been able to develop important critical thinking and problem solving skills that are a requirement in cybersecurity.

Many of the skills I learned throughout my coursework came from hands-on assignments and labs where we were required to analyze systems, identify vulnerabilities and understand how attacks could occur. Topics such as network security and cybersecurity analysis helped me understand how systems are designed and how they can be protected.

Program Reflection

While being at ODU I've had several different projects that allowed me to apply what I learned in class to real technical problems. One example of this is my Phishing URL Detection project, where I trained multiple machine learning models to identify whether or not a URL was phishing or legitimate. This was one of the main projects that helped me understand how cybersecurity problems can be addressed using data analysis and machine learning techniques. I also had assignments that would consist of vulnerability scanning labs or penetration testing exercises. These helped me understand how attackers exploit systems and how cyber professionals detect and prevent these attacks.

I encountered multiple obstacles during my learning process throughout the years. Cryptography was something that I originally struggled with as it was an unfamiliar concept at first. Certain cybersecurity tools such as Wireshark can feel overwhelming at first, but are much simpler than

they look. Over time, I began to feel more comfortable with certain tools and concepts as I worked on these assignments.

In cybersecurity, a lot of previous coursework is a stepping stone for future classes. When I took ethical hacking and penetration, I had already learned a lot of the basics with operating systems from previous classes and was familiar with some of the basic linux commands and programs that we would go on to use.

IDS 493 Reflection

IDS 493 is a course focused on creating an ePortfolio that shows a student's academic experiences, skills and career readiness. The purpose of this course is for students to develop a portfolio that organizes their projects and explains their experiences in order to prepare them for future career goals.

Learning how to present my work in such a professional format was a valuable experience. This course made me really think and go back to assignments that were more valuable than I realized at the time. I was able to think more carefully about the skills I developed and how those skills relate to real cybersecurity careers.

One part of my portfolio that I am proud of is the technical project section. This project demonstrates both technical skills and critical thinking. It is also one of the most complex assignments I have worked on throughout my time at ODU.

One of the most difficult parts of creating the portfolio was figuring out how to edit, add and remove certain pages or post on wordpress. Figuring out how to format everything was also a struggle but was a great learning experience. When putting everything together it also made me think about how an employee would view my portfolio and which parts would stand out from others.

Previous assignments of mine such as my Phishing URL Detection assignment or my Policy Analysis Paper helped me to successfully complete IDS 493. These were all projects that came from earlier cybersecurity courses that I've already finished.

Conclusion

I can say that throughout my time studying cybersecurity at ODU, different courses and experience have definitely helped me build a broader understanding of cybersecurity. A lot of classes combined technical skills with critical thinking which are necessary to understand how systems work and how to protect them. Interdisciplinary concepts include computer science, networking and data analysis.

My next steps after completing my degree at ODU are to continue building my technical skills and pursuing opportunities in the cybersecurity field. I first plan on completing several certifications, such as CompTIA Security+. Throughout my time at ODU I was able to gain knowledge and experiences that will be valuable for beginning my career in cybersecurity.