

Electronic Portfolio Reflective Essay

Janae Craig

Old Dominion University

IDS493: Electronic Portfolio

Professor Carin Andrews

August 3, 2024

Introduction

I've learned a ton of essential skills at Old Dominion University that will be really helpful for my career in cybersecurity. I've substantially enhanced these abilities by taking a variety of networking, ethical, communication, and IT-related courses. Three areas have received the majority of my attention: analytical and diagnostic skills, communication and presentation skills, and technical networking skills. I'll demonstrate in this essay how numerous assignments and projects have shaped my development and equipped me for a career in cybersecurity.

Analytical and Diagnostic Skills

One assignment, Lab 6.1, where I had to debug an erroneous IP address, particularly showcases my analytical and diagnostic abilities. In order to solve network problems, this assignment requires close attention to detail and a methodical approach. I discovered how important it is to comprehend networking standards and handle configuration issues in order to maintain a secure and functional network. Using Cisco Packet Tracer for network simulation and Protocol Data Unit (PDU) analysis was another important activity. This demonstrated my ability to identify and resolve network issues in intricate configurations. My programming and networking experience allowed me to take advantage of these simulation tools to improve performance and comprehend network behavior. My ability to think analytically was put to the test when I had to answer programming problems on my CYSE 250 final exam. I had to use my understanding of programming to solve issues in a predetermined amount of time. My understanding of the value of strong problem-solving abilities has increased as a result of this learning, as these abilities are critical for overcoming technical difficulties in the field of cybersecurity and frequently listed in job descriptions.

Presentation and Communication Skills

I used my presentation on the wiring at Maury High School to show off my communication abilities. I had to convey complicated technical information in an understandable and interesting manner. This research demonstrated my ability to simplify complex concepts, which is important in cybersecurity when attempting to communicate technological challenges to non-technical individuals. My research article on the topic of why humans are cybersecurity's weakest link also demonstrated my talent for effective communication. I researched how security is impacted by human behavior and had to effectively explain these difficult topics. My ability to effectively communicate and write, which I improved in IDS 300W, was essential for this and allowed me to express critical security issues. My ability to make rational and ethical decisions in professional settings was demonstrated by the case study on user data and whistleblowing. In order to assist me make educated choices, the project stressed the need of having clear communication and applied the ethical concepts I've studied. In cybersecurity, it is important to be able to comprehend the wider effects of technological decisions.

Technical Proficiency in Networking

My ability to design network infrastructure was truly put to the test when I designed Constant Hall's infrastructure at ODU. A thorough grasp of design principles, security protocols, and networking technology were required for this project. Using what I knew, I built a safe and useful network, demonstrating the technical proficiency required for cybersecurity positions. My technical talents were also demonstrated in my research paper on Microsoft Windows Servers. I looked at server administration and design, using technical expertise to solve practical issues. In the field of cybersecurity, where understanding server infrastructure is essential, this ability is highly valued. My performance in CYSE 300 Introduction to Cybersecurity is reflective of my

further education and fundamental understanding of cybersecurity. I have a solid foundation in core principles from this course, which will help me address technical issues in my future work.

Conclusion

I have developed a well-rounded skill set for a future in cybersecurity thanks to the variety of techniques and concepts that shaped my experience at Old Dominion University. I've gotten better at approaching issues from several angles and offering comprehensive solutions. Courses have stressed the importance of merging technical skills, issues of ethics, and effective communication. I can pursue a rewarding profession and effectively manage the always evolving cybersecurity landscape with the skills I've learned.