Reflective Essay

Jahleel Culbreath

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Introduction

Throughout my academic journey in cybersecurity at Old Dominion University. I have developed a range of technical and analytical skills essential to my future career. My interdisciplinary course work, combined with my experiences as a student athlete playing football, has strengthened my ability to problem solve, communicate effectively, and think critically. The three skills that I have honed during my studies are problem solving, teamwork, and adaptability. These skills emerged through coursework in cybersecurity, computer science, and general education courses, as well as my experiences on the football field. Each artifact I have created in my academic career demonstrates how these skills have prepared me for the workforce and my future in cybersecurity.

Problem Solving: Malware Analysis Project

One of the most important skills in cybersecurity is problem solving, which I refined through my Malware Analysis project. This assignment required me to analyze different types of malware, identify vulnerabilities in a system, and propose mitigation strategies. Completing this project required knowledge from multiple disciplines, including computer science, mathematics, and cybersecurity principles. I had to troubleshoot errors, research advanced malware techniques, and apply theoretical knowledge to practical scenarios. Courses such as IDS300W helped me develop research skills that were crucial in identifying relevant case studies and supporting my analysis.

The Problem-solving aspect of this project was particularly challenging because it required me to apply a structured methodology for analyzing threats. Initially, I struggled with identifying the behavior of the malware samples, but by leveraging knowledge from my programming and networking courses, I was able to dissect the patterns and pinpoint vulnerabilities. This process mimicked real-world cybersecurity incident response scenarios, where professionals must act swiftly to analyze and mitigate cyber threats.

Teamwork: Cybersecurity Group Project

Another essential skill I developed was teamwork, which is crucial in both cybersecurity and football. One of the best examples of this was a group project in my Network Security course, where I collaborated with classmates to design a secure network infrastructure for a mock company. Each team member had a specific role, and we had to communicate effectively to integrate our work into a cohesive final project.

Additionally, my experience as a football player helped me understand how to work with others under pressure, delegate tasks, and maintain accountability. Football requires seamless collaboration and trust among team members, much like working in a cybersecurity team to protect and serve. I learned how to manage conflicts, motivate my peers, and contribute to team success, which are skills that transfer directly to a professional work setting.

Cyber security job descriptions often highlight teamwork as a critical skill, especially for roles such as a security analyst, IT consultants, and system administrators. Organizations depend on cybersecurity professionals to work together to detect, mitigate, and respond to security incidents. By

participating in my group project, I gained firsthand experience in professional collaboration, a skill that will help me transition into my career.

Adaptability: Ethical Hacking Lab Reports

Another important skill that I have developed in my study at ODU is adaptability. Cybersecurity is a dynamic field that poses new threats and demands new technologies, which means that practitioners must update themselves frequently. My Ethical Hacking course involved lab reports that entailed gaining. New skills such as penetration testing using Kali Linux. These labs, at times, would involve problem solving of an unexpected error and the need to change approach. The biggest challenge I think I faced was using new penetration testing tools. When I was using Metasploit for the first time, there were errors in executing some of the exploits. I did not get upset, I went to the documentation, watched videos, and started typing different commands to see what would happen.

This process also helped me understand the importance of adaptability in the field of cybersecurity, where one must learn new things and tackle new threats regularly. Furthermore, my studies in IDS 300W and other interdisciplinary courses helped me to develop the ability to search for information and implement new knowledge in practice, which was useful for the fulfillment of such tasks. This made me realize that to be able to face new challenges with courage and to be able to solve problems in advance is very important. Adaptability is a much-appreciated skill by cybersecurity employers because cyber threat response professionals must be able to learn and grow with new security threats. Cyber attacks are frequent and

frequent Cybersecurity teams must always be on their toes to counter the activities of criminals. I was able to demonstrate my capability to acquire new technologies and solve problems on the fly while doing my Ethical Hacking labs, which is a critical asset for any cybersecurity practitioner.

The Intersection of Athletics and Cybersecurity

Besides my academic experiences, I have also been able to learn in the capacity of a football player at Old Dominion University. Football has also taught me discipline, resilience and time management skills that are very much required in the cybersecurity field. I have also had to develop strong organizational skills in order to balance my academics and athletics and meet deadlines while maintaining high performance in both areas.

Furthermore, football has once again provided me with an environment in which I am able to perform effectively under pressure. Cyber Security incidents are often time constrained and stressful events that require quick decisions. Just as I have to analyze my opponent's strategy on the field, I have to analyze and mitigate security threats effectively in cybersecurity. The competitive nature of both fields has helped me learn the value of hard work and the desire to always enhance my skills.

Conclusion

The interdisciplinary education that I received at Old Dominion University has played a key role in helping me to be ready for my future career in cybersecurity. I have been able to develop problem solving, teamwork, and adaptability skills in my courses across different disciplines which have been useful in my academic and athletic activities. IDS 300W and other similar courses have also further emphasized the need for research and interdisciplinary thinking as a way to address most problems in society. Moreover, my experience as a student-athlete has helped me to learn the value of resilience and collaboration, both of which will be useful in the cybersecurity field. This is because cybersecurity professionals require knowledge from various disciplines in order to protect digital assets effectively, and therefore an interdisciplinary thinker is crucial in my field. I am sure that through my coursework and experiences I am ready to face the future challenges of my career. In the end, cybersecurity is not only about technical knowledge – it is also about the capacity to work in a team, learn new things and solve problems. I believe that Old Dominion University has provided me with these essential skills and I am ready to use them in my professional life.