

Jaalen Cooper

IDS 493

As a cybersecurity major here at ODU, I have been fortunate enough to have an institution that has aided my academic journey by giving me the tools to develop essential skills for my future career. Over time, I've gained technical experience as well as improved critical thinking abilities, and strong communication skills. These three skills are crucial in order for a successful career in the cybersecurity field. This reflective essay will showcase how I have developed these skills from my coursework as well as discussing how they have shaped my academic experiences and prepared me for the workforce.

Technical Skills

First, there's my development of my technical skills. During my time here at ODU, I have had hands-on experience with multiple courses in the major. I have had courses that involved the usage of C++, Linux, and understanding Windows System Operations. Throughout my coursework, I have had the opportunity to work with a variety of tools and systems, all of which have contributed to building a practical understanding of cybersecurity. For instance, some of my coursework involved working with Linux systems in order to configure user accounts and manage system operations. Watching and participating in these technical tasks enhanced my ability to work with critical infrastructure, which is a crucial aspect of cybersecurity. Furthermore, I have also participated in labs focused on password security and system administration, which has allowed me to gain hands-on experience that's deepened my understanding of how attackers may try and exploit vulnerabilities and how to mitigate those risks. The technical knowledge that I've acquired over time directly translates to the job market as there are many roles that require a deep understanding of systems administration, network security, and threat mitigation.

Critical Thinking Skills

Alongside technical skills that I've gained, there's also the development of better critical thinking, which is a vital ability that I've developed throughout my academic experience. In courses related to digital forensics for example, I have been given the task to analyze complex data and identify key information and data that may indicate some kind of breach or cyberattack. To do so I had to examine system logs, network traffic, and other forensic artifacts, which required me to think critically and make well-reasoned, evidence-based decisions. These experiences have taught me how to approach and tackle cybersecurity issues from multiple perspectives, considering all the potential risks, implications, and solutions. By taking critical thinking and applying it to a variety of cyber incidents, I have developed the skills needed to

respond swiftly and effectively to emerging threats, which is essential for any cybersecurity professional.

Communication Skills

Effective communication is another skill that I have cultivated through my coursework and various projects. The ability to translate complex technical concepts into accessible language is a key competency in the cybersecurity field, especially when collaborating with individuals who may not have a technical background. In my assignments, I have written technical reports and policy breakdowns, which required me to communicate my findings in a clear and structured manner. These writing experiences have strengthened my ability to convey complex ideas succinctly and persuasively. In addition to written communication, I have also developed strong verbal communication skills, which are essential for presenting security analyses and risk assessments to both technical teams and organizational leaders.

Interdisciplinary Approach and Career Readiness

ODU's interdisciplinary approach to cybersecurity education has been key in preparing me for a career in this dynamic field. The integration of knowledge from various other disciplines, from healthcare to policy to business, has provided me with a more in-depth understanding of how cybersecurity fits into the broader technological and organizational landscape. This interdisciplinary exposure has enabled me to tackle problems with a broader perspective, bringing in diverse perspectives and approaches to identify potential solutions as well as collaborate across disciplines. In particular, the integration of technical and non-technical coursework has helped enhance my ability to engage with cybersecurity issues from both a practical and strategic viewpoint. These lessons will be invaluable to me in my future career, where there is a very high likelihood that I will need to work with cross-functional teams to implement effective cybersecurity measures. Courses like IDS 300W, which focused on research and writing, have prepared me to engage in continuous learning and development, a critical skill in the ever-evolving field of cybersecurity. The ability to conduct research, assess new developments, and stay informed about emerging threats is vital for maintaining a proactive security posture. The lessons learned from such courses have strengthened my foundation for lifelong learning, which is essential as I enter the workforce and continue to build my career in cybersecurity.

Conclusion

This reflective essay illustrates how the coursework I've done along with my experiences at ODU have played a pivotal role in shaping my readiness for a career in cybersecurity. By honing my technical, analytical, and communicative skills, I am well-prepared to engage in the challenges of the cybersecurity profession and contribute to securing digital systems and advancing best practices in the field.