Reflection Essay

Nathaly Flores

IDS 493 Professor Pham

Old Dominion University

## Introduction

"We strive to decide our own fate. We act with self-reliance, trusting in our abilities. We accept responsibility for our conduct and maintaining and improving the skills that enable us to produce added value." Jeffrey K. Liker. This May of 2022, hundreds of students got the opportunity to graduate all over the United States by participating in their university commencement. Students formally acquire their degrees before their school's presidential cortege with family and friends. It is a time of rejoicing that a student has spent years of school are finally over, and it is time to head out to realize the careers they graduated or obtained a degree in and use the skills they have acquired. I am Nathaly Flores. I am one of those students who got the opportunity to walk ahead of my actual graduation date because summer school does not offer any commencement ceremony. After finishing summer school this week, I will obtain my Bachelor of Science in Cybersecurity degree.

I am passionate about Cybersecurity because it incorporates numerous disciplines integrating computer science, psychology, and criminal justice, including modeling and simulation. As stated in the school of Cybersecurity at Old Dominion University, the significance of an interdisciplinary group "enables a holistic approach to cybersecurity problems, supporting the mission of developing high-impact, cross-disciplinary research initiatives that center on cybersecurity and being a source of cyber expertise to the University, the Hampton Roads area" (ODU). I have gathered much wisdom throughout my college career. In college, I was assigned to create an incredible amount of substantive works that depicted my creativity, critical thinking skills, and research skills. I have learned to guide by observing those around me effectively. I have observed leadership techniques from my father and those I have worked for. I

have observed how to lead effectively as a servant leader while building others to lead themselves. I will use this essay to display the skills as a leader that I gathered through my education and personal experience.

### **Technical skills**

Technical skills are critical in Cybersecurity. Technical skills mean having the specialized wisdom and expertise required to perform specific tasks and use specific tools and programs in real-world problems. Since this course, I have learned what Metasploit is and what Pen testing is all about; by far, this class was the most enjoyable and technical course I have taken.

## **Artifact 1: Cybersecurity Techniques and Operations CYSE 301**

I took Cybersecurity Techniques and Operations, known as CYSE 301, and I can honestly say that out of all my ODU classes, this was one of the best hands-on experiences I have ever had. I feel I learned more about Cybersecurity, for instance, Wireshark, Linux, pfSense, Metasploit, Jack the ripper, SQL injection, and stenography. This assignment showed us how to hack into someone's windows account using various tools to exploit a computer. Metasploit was the most exciting and fun of all, learning how to hack into a windows computer by creating fake accounts and using Metasploit to msfvenon and Apache server to get things going.

### **Artifact 2: Programming and Network CYSE 250**

Programming was not the hardest or the easiest, but it requires so much attention to detail when using Python. Python is a computer programming terminology often used to create websites and software and conduct data analysis. Python, you can create different programs that are not specific to any problems. You can also create games with Python, it's very essential to know.

### **Artifact 3: Linux CYSE 270**

Linux is an open-source operating system founded on Unix; the main objective of Linux is to create an operating free for everyone to use and learn and is less vulnerable and more secure than Windows operating systems. We learned how to use fundamental commands in Linux in this class, and I enjoyed this class. I honestly did not know Linux, much less how to operate Linux, but this class helped me understand a few commands and do what was asked of me regarding assignments.

## **Critical Thinking**

Critical thinking means analyzing facts, evidence, observing, and arguments to form a judgment—Cybersecurity specializes in unique, complex problems integrating various disciplines. My artifact below shows the skill I learned in my digital forensics class.

### **Artifact 1: Digital Forensics CYSE 407**

Digital Forensics for many years intrigued my curiosity until I took this course; I understood what digital forensics was all about. It showed us various types of processes and how physical and digital investigations were not the same. I can say this class was also technical

because it required that we do an investigation as if we were the ones in the field. I also learned the different types of tools required, for instance, software applications that help to preserve identify, extract and document computer evidence for law procedures. These tools help forensics make things easy and complete reports for legal Systems.

# **Artifact 2: Cyber Law CYSE 406**

Cyberlaw was the most exciting class I have ever taken, and I know it might sound a bit dreading, but I can guarantee you it was not. This class taught us that legislation concentrated on the adequate behavioral use of technology, including computer hardware and software, the Internet, and networks. Cyberlaw aids safeguard users from harm by allowing the investigation and prosecution of online criminal activity. In my essay about Carpenter v. The United States ruling, the Supreme court considered if the fourth amendment allows police officers to acquire cell phone location records pinpointing a person's location and activities over 127 days without a warrant.

### **Writing Skills**

Writing skills are distinctive abilities that help writers put their thoughts into words in a meaningful form. The three artifacts in this area show my ability to analyze data and create a logical view of my position while addressing other viewpoints.

### **Artifacts 1: Internet Awareness of Cybercrimes CYSE 494**

In my research paper, I have posted for CYSE 494, which is the Entrepreneurship class. I wrote about the awareness of the Internet and cybercrimes, which talks about cybersex

trafficking and romance scams and having overall internet awareness of these types of scams occurring every day and how they integrate. I am passionate about this topic because I know people dearly that have fallen victims to these scams. I wrote this because I hope people realize and understand how easy it can be for someone to scam you if you are not aware of their game; I also think people who do not speak English and come from other countries are more vulnerable to being targeted. I believe we should be careful whom we talk to online or what we post. The less you post, the better, and the less they know about you, the less you are targeted. I hope it can make a difference for those with children and be more aware of your children using the Internet or on their tablets. I hope to one day make a difference and help others not fall victims to these cybercrimes but make a difference by creating an app that will help them verify they are being scammed.

#### **Artifact 2: Ethical Class I took in TCC**

Although I did not take Ethics at Old Dominion University, I learned so much about this course in Tidewater Community college Ethics course PHI220. Ethics or ethical philosophy is a branch of philosophy that "concerns systematizing, defending and guiding concepts of right and wrong behavior, of good and generally acceptable behavior.

For the assignment, I had to write what ethical issues are constant. Beneficence, nonmaleficence, autonomy, and justice are the four ethical principles. Right can be described as a justified claim that people and groups can create upon others or society. Rights-based ethics means that ethical behavior must uphold the rights of people, such as civil rights within a democracy. So, I wrote about being a single parent raising two children and how I can relate more to foot and Kant because I believe in teaching my children right from wrong and having determinism. Then we

have the trolley problem of whether were making the right choice. For example, to sacrifice our life or another when something ultimatums happen in our life, like in the movie "unstoppable," choosing to sacrifice your own life or five others, are the questions you have to think about whether we are doing something right or wrong.

### Artifact 3: Cybersecurity, Technology, and Society CYSE 200T

One of my first classes in Cybersecurity was Cybersecurity, Technology, and Society, known as CYSE 200T. This class discussed the framework and cyberattacked that grew in large numbers, whether a company or against countries. In this class, I learned about five framework core activities of the NIST Cybersecurity Framework: Identity, Protect, Detect, Respond, and Recover. I wrote this essay that critical infrastructure provides services and supports society and comfort, which is central to our nation's security, economy, and health, especially the electric grid. The electric grid must be updated with security because of the constant threats. This class opens my eyes to the fact that everything around us is in constant threat, and then cybersecurity experts are much needed more than ever to protect and defend our country from cyber-attacks.

## Conclusion

During my time as a student, I capped down the fundamental skills I learned in my academic career. In addition, I identified how the utilization of the skills of Cybersecurity. The skills surpass other interdisciplinary studies, which I have acquired over the years and enhanced my attention to detail, communication, and desire to learn. Also, all three skills have prepared me

for a career in Cybersecurity and will help me in my journey. Attention to elements is a vital skill concerning Cybersecurity. Safeguarding an organization against cyber breaches requires being highly vigilant and detail-oriented to detect vulnerabilities and risks effectively. Cybersecurity is a profession comprised of numerous academic disciplines. Realizing the past from the respective disciplines and courses in the Cybersecurity curriculum, I complete that the academic disciplines are essential skills for me to employ in the workforce. I have learned diverse techniques from the Information Technology and Cybersecurity disciplines. Combining these disciplines will help me succeed when I find the new career path that ODU has prepared me for over the years.