Writing Assignment Two: Personal Narrative Essay

Bradyn Ritchie

Old Dominion University

IDS 493: Electronic Portfolio Project

Dr. Sherron Gordon-Phan

3/29/24

Abstract

This paper aims to summarize my academic career and initial interest in my career choice of cybersecurity, primarily beginning in high school and into my senior year of college. In addition to this, it will also discuss my plans for after graduation and any goals that I wish to accomplish within my career.

Experiences Before College

Since I was a kid, I had always been fascinated by the world of electronics. I would spend hours a day of my childhood and adolescence behind a computer watching in awe as the computer screen's lights flashed with every game I played or new web page I visited. I always found myself wondering about how these machines worked and just how they knew so much information at just the click of a button. At the time, I simply thought that they were too high tech for anyone in the world to fully understand. This is ultimately my very first memory of the world of electronics and computers, which I believe was one of the earliest contributing factors in my choosing of a career path.

In high school, I enrolled in multiple information technology classes. Since there were no computer related elective classes in my middle school, I was very eager to dive into them during my freshman year of high school. The classes I took involved a wide variety of technology related subjects and topics, such as the Microsoft Office Suite, webpage design and development, video game development, Java programming, computer hardware, and most importantly, cybersecurity. Through these classes, I was able to get a head start on my career by obtaining industry certifications in both the Microsoft Office Suite and website development markup languages, such as CSS and HTML. At this point in time, I knew that I wanted to pursue a career in computers, but I just wasn't sure what specific subject I was interested in enough to pursue. However, once I took the classes in cybersecurity and computer hardware, I knew that it was the correct career path for me, as none of the other courses really "clicked" with me. I found that it was very interesting to see both the inner workings of computers, printers, and other electronic devices. In addition to this, I found troubleshooting these devices to be very enjoyable. While I

Writing Assignment Two: Personal Narrative

have many fond memories of the computer hardware class, the most memorable project is when we were tasked with fixing computers for the public school system. Each laptop that we were given had some type of hardware or software issue that we were meant to locate the cause of and fix. This could be a wide range of issues, such as a faulty hard drive, RAM not being seated properly, out of date drivers, and much more. However, once we located the problem, some could not be fixed by us as students and had to be escalated to the IT department of the public school system, as we didn't have administrative privileges to administer the solution. Nevertheless, this assignment was a very eye opening experience and provided some real world scenarios that IT workers would face on a daily basis, which is the type of position I'm aiming for after college.

Learning the various ins and outs of how the internet as a whole works in the cybersecurity class was also extremely fascinating, eventually leading me to pursue my degree in cybersecurity at both my local community college and Old Dominion University. One of my best experiences in the class was participating in the annual Radford University RUSecure cybersecurity capture the flag event. This is a nationwide event in which various educational institutions ranging from high schools to undergraduate college students compete against each other to solve cybersecurity related scenarios and problems, with the questions getting progressively harder as you continue (Radford University, n.d). With only being in high school at the time, and having limited knowledge in the field of cybersecurity, I remember struggling to answer many of the more technical questions. Though, I do recall excelling in the forensics aspect of the competition in which we had to search for small pieces of obscure information on the whole Internet. However, the content of the two classes were not the only contributing factor in my decision to pursue my degree. My two teachers that I had for both classes provided a

wealth of information in regard to the field, such as the many opportunities available, and made me much more interested in the field of information technology than I was before. I would say that my experiences in high school were likely the largest factor contributing to my degree and career choice. Performing a narrative reflection on past events such as this is critical in order to better understand the many skills that I have developed through my educational career (Nguyen, 2013).

Laurel Ridge Community College

Upon beginning my higher education at my local community college, Laurel Ridge Community College, I was very overwhelmed since my entire first semester was taught all online due to the Coronavirus pandemic. However, it was still a great experience, as I was able to learn many new career specific skills through the use of various online, virtual laboratories. In addition to this, these online courses gave me a large amount of flexibility and ultimately improved upon my time management skills. Many of my beginning courses were focused on basic computer information skills, such as computer hardware, operating systems, and types of computer networks. These courses gave me the foundation needed in order to succeed in the more advanced, major specific classes at both Laurel Ridge and Old Dominion University. During these classes, I was introduced to a wide array of programming and scripting languages in order to aid me in automating computer tasks, such as Javascript, Python, and Microsoft PowerShell. One of my favorite classes at Laurel Ridge was focused on the types of cyber attacks that malicious threat actors carry out on computer systems. In this course, we were able to create these malicious attacks ourselves and launch them within controlled virtual environments in order to study their effects on the victim's computer system. Despite being

enrolled in the cybersecurity program, most of the courses I enrolled in focused on general information technology topics as opposed to cybersecurity. This was one of the main driving factors that led me to further my education at Old Dominion University.

One of my most memorable experiences at Laurel Ridge was attending the National Security Agency's virtual cyber exercise, as this was a requirement for my associate degree capstone course. The format of this capture the flag event was very similar to that of the Radford University competition discussed above. Prestigious universities and military institutions from all over the nation competed in this three day event to see which team could solve the most challenges (National Security Agency, n.d.). Some of the more notable attendees that we were up against included the Massachusetts Institute of Technology, Carnegie Mellon University, and the United States Army Cyber Institute. Due to time constraints and other deadlines, the team at my college only chose to participate on the first day of the event. The challenges were extremely difficult when compared to the Radford University RUSecure Challenge. Overall, the NSA capture the flag event was definitely a great learning experience and I was very excited to have been a part of it.

Old Dominion University

After graduating from Laurel Ridge Community College, I was very eager to continue on my academic journey to Old Dominion University. Upon attending my first semester, I was very impressed with the number of hands-on labs that are utilized in order to teach a wide variety of topics, especially for online students such as myself. Through the use of these virtual experimentation labs, I was able to strengthen many existing skills and learn a wide array of new ones. Some of the skills that I believe I improved upon the most include Wireshark, Windows

6

Powershell, and Linux. Old Dominion taught me many cybersecurity related topics, including different kinds of attacks, defenses that can be introduced to mitigate these attacks, and utilizing Linux and the Windows command line interface. Old Dominion was also my introduction to the large realm of interdisciplinary courses, which proved to be some of my favorite classes during my academic career. Many of my favored classes related to both cybersecurity and law, such as the Cybersecurity Policy class that I attended my junior year. It was extremely fascinating to see how the internet has caused laws and policies to change throughout the years. The interdisciplinary criminology course required for my degree was extremely interesting as well, as it went into deep information on cybercriminals. I found it very fascinating to read about the psychology behind these criminals and what entices them to carry out these potentially dangerous attacks. In addition to the extremely engaging courses, the people and many resources available were some of the primary factors that further solidified my interest in cybersecurity. My professors at both Laurel Ridge and Old Dominion were very supportive and excellent at explaining the intricate details of topics pertaining to information technology and cybersecurity. They provided great feedback on nearly all of my assignments so I knew what topics and skills I needed to improve upon.

Future Goals & Conclusion

Establishing goals is one of many extremely important steps on the path to success. According to McAdams, setting goals is a critical aspect to include in one's personal narrative and life story (McAdams, 2001). As I'm about to graduate from Old Dominion, I'm very eager to join the workforce in the information technology industry. While I am working an entry level position, I plan to gain other industry level certifications, such as the Comptia A+, Security+, and Network+. Once I gain relevant experience, I intend to transition to a more cybersecurity related position where I can exercise the many skills that I learned from my time at both Laurel Ridge and Old Dominion. My largest goal is to eventually obtain a cybersecurity position with the national government, preferably with the FBI, NSA, or DOD. By reflecting on these previous experiences, I'm confident that the skills I learned throughout my academic career will aid me in accomplishing every one of these goals.

References

- McAdams, D. P. (2001). The psychology of life stories. *Review of General Psychology*, 5(2), 100-122. https://doi.org/10.1037//1089-2680.5.2.100
- National Security Agency. (n.d.). NSA Cyber Exercise (NCX). National Security Agency/Central

Security Service. https://www.nsa.gov/Cybersecurity/NSA-Cyber-Exercise/

Nguyen, C. F. (2013). The ePortfolio as a living portal: A medium for student learning, identity,

and assessment. International Journal of ePortfolio, 3(2), 135-148.

Radford University. (n.d.). RUSecure CTF. Retrieved March 27, 2024, from

https://rusecurectf.radford.edu/about