# **Reflective Essay**

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## **Abstract**

During my time at Old Dominion University, I was exposed to many different real-world skills that have helped shape me into an asset for Cybersecurity. A plethora of research assignments have helped me adapt my mind to allow for thorough critical thinking. Technical assignments have allowed me to get hands on with many of the different tools Cybersecurity professionals utilize each day. Through research and application, I have been afforded the opportunity to become a far better problem solver. This reflective essay will highlight unique assignments while addressing the creation of my ePortfolio and how the necessary reflection helped me understand the growth I have attained while at Old Dominion University.

### **Portfolio Creation**

I struggled at the beginning when creating my portfolio. The complete creative freedom seemed daunting because I am used to having instructions on presentation/design methods. After a few days of deliberation, I decided that I wanted to have a simplistic design for my portfolio. I wanted to ensure the viewer had an easy interface to engage with. Utilizing some examples, I eventually found my stylistic choice. With a design in mind, I then had to brainstorm to figure out the skillsets I wished to highlight. I decided to highlight my problem-solving abilities, technical abilities, and critical thinking abilities. Although these skills are important, it is also important to provide information on my life and professional career. This give the portfolio a personal touch and offers a look into the person that I am. To provide the best and more coherent information possible, I began working on a new resume and personal narrative while looking into my past work. Each piece of work I have created has transformed my understanding of what I can achieve.

### **Personal Narrative**

The first artifact I wanted to address was the need for a personal narrative. This was a little difficult to create upon reflection. I have dealt with a lot of things in my life, so I wanted to illustrate to the reader my abilities gained throughout my life. I had to reflect on past failures and successes that shows my willingness to work hard and persevere. I also wanted to showcase my natural aptitude for technology and science to inform the reader of my abilities. It is important to tell my story, but it is more important for the reader to understand the level of growth I have attained throughout my life. Emily Smith notes this kind of story as a redemptive story (Emily

Esfahani Smith, 2017). By discussing the challenges I have faced, it allows the readers to fully understand my mindset and personal characteristics.

## **Problem Solving**

#### **Artifact 1**

When looking for artifacts to display my problem-solving abilities, I came across some interesting pieces I created that were related to specific policies. The first artifact is a policy creation paper where I act as a security administrator that needs to develop a security policy for a corporation. I chose to highlight this assignment because it required that I maintain a unique viewpoint during its creation. I have never held the position of a security administrator before, so being required to make this policy proved a real challenge. Utilizing the knowledge I have gained throughout my professional career and resources sited in this paper, I was able to successfully create a policy worth implementing. This unique opportunity allows me to have a mindset that can solve problems outside of the scope of my responsibilities.

#### **Artifact 2**

The second artifact I chose to highlight was my final project for Entrepreneurship in Cybersecurity. This artifact required very intense research and understanding while also enforcing an entrepreneurial mindset. The entire assignment required me to think as an entrepreneur and build a solution for a problem area in our society. This assignment offered the unique challenge of meshing critical thinking and problem solving into one area. I was also required to utilize different software to create graphs and illustrations to depict different structures within the organization. This interdisciplinary approach allowed me to act as if I held

multiple roles at once. I was able to further my understanding of the important of interdisciplinary thinking and its valuable outcomes.

#### **Artifact 3**

The third artifact I provided is an assignment that required the analysis of a chosen policy. This assignment required that I think in a way that criticizes, but also offers solutions to a problem. I was able to better my research ability and analysis ability by working through this assignment. Recalling this class, I was required to pick a strategy and analyze its affects over the semester. The collective of assignments helped me develop the ability to provide thoroughly researched work with a proper solution. This kind of understanding is important for Cybersecurity Analysts because they may need to make security recommendations for their employer (McCraw, 2023).

## Critical Thinking

#### **Artifact 1**

This artifact required that I research into cryptocurrency and explain its complex nature. This assignment was daunting because it required a lot of research and the understanding of complex information. This assignment forced me to learn many new concepts while also forcing me to learn how everything is connected. This assignment helped enhance my ability to critically think due to the complexity of the subject and need to understand advanced processes I had no previous experience with. Understanding cryptocurrencies also helped me further my understanding of cryptography and encryption standards which is an important area of Cybersecurity. This is because cryptography is the process of encrypting information for transmission (Kaspersky, 2019).

#### **Artifact 2**

The whistle blowing case analysis was unique due to the need to think from different ethical viewpoints. This assignment required that I analyze actions taken by a person through multiple ethical lenses and how each view perceives the actions taken. This class offered many opportunities to utilize different avenues of thought. This skill is important when working in a real-world setting due to the ethical implications surrounding data and its safety. This assignment helped me understand that multiple ways of thought are an important asset when analyzing any information or event.

#### **Artifact 3**

I chose this artifact because its another example of interdisciplinary understanding and successful critical thinking. This assignment required the usage and understanding of multiple ethical viewpoints. Utilizing these concepts, I was able to discuss the ethical implications of a person's actions successfully. This assignment helped further progress my understanding of critical thinking and interdisciplinary importance. This also helped me recognize that offering a different avenue of thought often offers many different solutions or viewpoints.

## **Technical Skills**

## **Artifact 1**

I chose this artifact because it was the first time I actively setup a network involving a client and gateway pc. The work performed for this assignment directly relates to careers in my field and some outside of my field. This assignment gave the me opportunity to learn new skills and better my understanding of backend development and networking. Leveraging my network

understanding and previous Linux command line work helped me achieve success with this assignment. This also helped further my understanding of firewalls and how to properly configure them via Linux.

#### **Artifact 2**

I included this artifact because it offered another avenue of technical ability, I had no experience with. This assignment required I act the part of an attacker where I crack the passwords associated with accounts on a specific machine. This assignment helped expose me to new areas of security that I was not privileged to experience yet. This assignment also reflects some of the requirements of red team/pen tester in Cybersecurity. These individuals actively attack systems utilizing ethical hacking concepts to find vulnerabilities in systems and accounts (Staff Writers, 2019).

#### **Artifact 3**

I chose this artifact because it also provided me with concepts I was not exposed to at the time. This assignment required that I create shell scripts, utilizing vi editor, in Linux to perform sample programs. This assignment challenged me to learn a more intensive concept by consistently practicing ensuring proper execution. With exposure to this came further understanding in more complex concepts like automation. This baseline understanding gives me the resources to comfortably understand new concepts within scripting areas. Scripting is important because we can utilize automation to free up time for other security related items (Swain, 2023).

## **Finishing My Portfolio**

After analyzing each piece of work, I ultimately decided on attaching the artifacts discussed above. I feel that each one of these artifacts shows a different aspect of my education and how different my work can be. I also believe these artifacts show my progression over time and allow the viewer to see my evolution. Each artifact has provided some positive aspect to my career readiness and personal development.

#### Conclusion

Through my academic career, I have been exposed to many different skills and viewpoints that have progressed me to new heights. Each individual assignment, test, quiz, discussion board, research paper, and project have all encouraged me to look from a different angle. The artifacts I have provided are some of the best works I have created over the last four years. Through the construction of my portfolio to its completion I have gained valuable insight into myself. Through the encouraged evolution of my skills, I know that I am career ready.

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