Reflection Essay

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Abstract-- The electronic portfolio project has been incredibly valuable to my academic and professional career, as it has provided me with an elaborate means for reflection as it relates to my progression through this digital era. This reflection essay aims to analyze my skills and artifacts in an attempt to assess my learning and highlight the influence my academic experiences had on my career readiness. Throughout my introspection, I identified three key skills that I gained/refined through my interdisciplinary education: critical thinking, research literacy, and communication skills. These skills have been critical in my academic and professional progression and effectively highlight the value of an interdisciplinary education as it pertains to career readiness. Keywords: cybersecurity, interdisciplinary, reflective

Introduction

Old Dominion University's (ODU) cybersecurity degree program excels in the context of interdisciplinary education. The cybersecurity program page on the official ODU website presents a set of mission statements that effectively encompass their dedication towards such an approach. These objectives include coordinating "interdisciplinary academic programming related to cybersecurity," promoting "awareness about cybersecurity, cyber forensics, cyber crime, and cyber operations using an interdisciplinary lens," and facilitating "a collaborative approach for responding to cybersecurity issues" (ODU, DATE). Throughout my education at ODU, I have participated in many courses which focus on concepts pertaining to law, ethics, and society in the context of cybersecurity. These courses have fostered immense growth in terms of my ability to operate in an interdisciplinary manner.

There are three primary skills which I acquired during my academic career. The first of which can be summarized by the term "communication;" however, it also encompasses the ability to effectively articulate thoughts/ideas in a digestible and/or actionable manner. The second skill relates to research literacy and the ability to properly analyze and integrate the corresponding information. The final skill is critical thinking, which is incredibly important in the context of interdisciplinary research. In this reflection, I will present key artifacts that effectively demonstrate these learned/refined skills.

Skill 1

The first skill I will be highlighting in this reflection essay relates to communication capabilities. The ability to effectively communicate in academic and professional environments can significantly impact one's prospects and current relations. Good communication skills are

also of paramount importance when sharing thoughts or ideas, as a communication failure can lead to the portrayal of a different idea altogether.

Artifact 1A. Visual Argument

Artifact 1A was created in the context of the IDS300W (Interdisciplinary Theories and Concepts) course and aims to illustrate our term paper's topic as a visual argument. The purpose of developing this artifact was to "pin down the crux of your argument in a singular image ... conveying it in a more multidisciplinary fashion" (IDS300W ODU CITE HERE). This visual argument was created to demonstrate the scale and influence of government omniscience in a manner that is digestible for a larger audience.



"The human race and it's affinity towards progress has potentiated corporate greed and sowed distrust between governing bodies and their constituents (albeit unexpectedly). Among this progress lies technological advancements which perpetuate the in-place powers and rules of society. It is virtually impossible to sufficiently interface with modern technology and contemporary society without sacrificing one's privacy to some extent. Public roadways, residential homes, and shared properties are littered with security cameras, license plate readers, facial recognition tools, and other surveillance equipment. Digital services and applications monitor your activity to derive valuable data for advertising such as your browsing history, precise location patterns, relationships and acquaintances, and consumerist interests. Social media platforms are an inherent threat to privacy on a sociological basis, where sharing personal information and details has become the norm. No matter where one goes or what one does, a disconcertingly large majority of the population is under constant surveillance. Not only is this unsettling by nature of principle, but it also manipulates the manner in which constituents think and act. This is of course, advantageous to corporations and governments, where surveillance acts as a deterrence against bad actors; however, when does the deterrence end if surveillance exists virtually everywhere? To what extent does this deterrence influence how we operate in society, and does it stop when we are alone? This is the question that my visual argument aims to present."

https://psyntheses.github.io/blog/2025/03/tempora-obscura/

Artifact 1B. Term Paper

Artifact 1B was also created in the context of the IDS300W course, and is a more elaborate presentation of the ideas conveyed by the visual argument in Artifact A. With this medium, I dive deeper into the specifics of the scale of modern surveillance and it's impact on human behavior. Although the medium is different, the paper still aims to articulate the concerns in a manner that is digestible for a more general audience.

https://psyntheses.github.io/artifacts/techandsociety/ids300w/

Artifact 1C. Narrative Essay

Artifact 1C was created in the context of the Electronic Portfolio Project (IDS493) course, and effectively details a high-level overview of the processes and mechanisms that led to my current position. I not only refined my communication skills through the articulation of my progression, but also present the intended ideas in a manner that is digestible for my target audience.

https://psyntheses.github.io/

Skill 2

The second skill I will be highlighting my ability to properly analyze and integrate credible sources into the structuring of my thoughts and ideas. This is of critical importance in the context of the interdisciplinary research process, and has also contributed greatly to my career-readiness. Research literacy skills have greatly enhanced the credibility and accuracy of much of my work, and has instilled a strong confidence within me as it pertains to my ability to

effectively navigate academic and professional literature. It has also strengthened my ability to effectively search for valuable sources and verify whether or not said sources are credible.

Artifact 2A. Research Paper

In the context of the SOC205S (Data, Technology, Society) course, I developed Artifact 2A: A paper that aims to highlight the critical growth of mass surveillance. I am personally passionate about digital privacy and security, and these concepts are influenced by mass surveillance. This research paper relies on many interdisciplinary sources which assist me in effectively articulating my thoughts as they relate to mass surveillance. These sources also address and integrate various interdisciplinary insights from researchers and professionals. https://psyntheses.github.io/artifacts/techandsociety/soc205s/

Artifact 2B. Research Paper

Artifact 2B. is another research paper that was created under the context of the CS462 (Cybersecurity Fundamentals) course. It presents a timeline of the recent attacks on the Internet Archive and details the specifics of the corresponding incidents. I found that developing this paper helped to strengthen my ability to effectively integrate multiple sources into cohesive, actionable insights.

https://psyntheses.github.io/artifacts/cybersecurity/cs462/

Artifact 2C. Policy Analysis (5)

Artifact 2C. represents the fifth policy analysis I created for the CYSE425W (Cybersecurity Strategy and Policy) course, and contributed greatly to strengthening my ability to derive valuable insights from sources. This specific policy analysis details a high-level overview of methods for properly assessing the effectiveness of the European Cyber Resilience Act (CRA).

https://psyntheses.github.io/artifacts/lawandethics/cyse425w/

Skill 3

The third and final skill I will be detailing in this reflection essay is critical thinking. This is the string that holds virtually every other skill in place and fortifies one's ability to effectively engage in the interdisciplinary research process. It is critical in deriving valuable insights from interdisciplinary sources and properly integrating them in a truly interdisciplinary fashion.

Artifact 3A. Final Paper

Artifact 3A. is the final paper I developed at the end of the CYSE368 (Cybersecurity Internship) course. It is a granular analysis of the timelines which coincide with my employment, and the various influences it had on my capabilities (and vice-versa). The development of this artifact was a very reflective experience, and required a great-deal of critical thinking to properly analyze the events which lead to my current position.

https://psyntheses.github.io/artifacts/internship/cyse368/

Artifact 3B. Research Paper

Artifact 3B. is a research paper developed in the context of the CYSE280 (Windows System Management and Security) course that details the best practices for optimizing and hardening a Windows 10 environment. This integrated experience from my academic and professional careers, and extracurricular activities. In order to effectively identify an effective route for the goals being presented by the paper, there was a great deal of critical thinking involved.

https://psyntheses.github.io/artifacts/cybersecurity/cyse280/

Artifact 3C. Case Analysis

Artifact 3C. is a case analysis on privacy that was created under the context of my PHIL355E (Cybersecurity Ethics) course. This assignment required me to apply a Utilitarian perspective to an argument regarding the privacy implications inherent in the design of Google Street View, and methods to offset these risks. I found that virtually every case analysis completed throughout this course required a great deal of critical thinking.

https://psyntheses.github.io/artifacts/lawandethics/phil355e/

Conclusion

Overall, the ODU cybersecurity program excelled in providing an interdisciplinary education. Each and every course strongly aligned with the mission statements presented on the aforementioned page. I believe that the interdisciplinary methods and theories were crucial to my understanding of my coursework, and each course experience further refined my interdisciplinary research capabilities. I would say that the IDS 300W course was incredibly

effective at preparing my for my program coursework, as it taught me how to better articulate my thoughts and ideas. Interdisciplinary thinking is incredibly important to the field of cybersecurity, as it is inter-weaved with many different fields/subject areas such as law, ethics, society, and virtually any field that interfaces with technology in any way.

References

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