

Reflective Essay

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Abstract

This reflective essay highlights the skills and experiences I have acquired throughout my college career, demonstrating how I have grown both technically and professionally. Through a combination of hands-on projects, research assignments, and investigative exercises, I have developed critical thinking, problem-solving, technical proficiency, and organizational skills. The artifacts included in this ePortfolio showcase my ability to overcome challenges, apply knowledge in practical settings, and communicate findings effectively. These experiences have prepared me to enter the workforce with confidence and adaptability, emphasizing my readiness for careers in cybersecurity, IT, and criminal justice.

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Introduction

My ePortfolio serves as a comprehensive reflection of my college career, showcasing the growth of my skills and the diverse experiences that shaped them. Unlike a program focused solely on one discipline, my coursework spanned cybersecurity, IT network security, criminal justice, and cybercrime, allowing me to approach problems from multiple perspectives. This diversity encouraged me to think critically, persist through technical challenges, and refine both my hands-on and investigative abilities.

Through this journey, I developed a set of skills that are not only foundational to my future career but also demonstrate my ability to learn, adapt, and apply knowledge in real-world contexts. My work with Python and Linux, for instance, was initially challenging, but my determination to master these tools resulted in technical growth and confidence. Similarly, research-based projects strengthened my organizational, investigative, and communication abilities, reinforcing the importance of attention to detail and thoughtful analysis. The artifacts included in this ePortfolio illustrate these skills in action and reflect the interdisciplinary nature of my education.

Critical Thinking

Artifact 1: Python – Socket Programming Project

One of the most significant ways I developed critical thinking was through the Python Socket Programming Project. This project, completed in Basic Cyber Programming and Networking, involved accessing a personal website from a business network using socket programming. It was my first experience with socket programming, and it required not only a technical

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understanding of networking concepts but also analytical reasoning to implement and troubleshoot the code.

Working on this project challenged me to think critically about how systems communicate across networks. I applied what I had learned in class to a practical scenario, experimenting with code to establish stable connections and ensure proper data transfer. The experience demanded persistence and problem-solving, especially when debugging errors or troubleshooting unexpected network behavior. By the end of the project, I had a deeper understanding of network communication, and the project was recognized as one of the best in the class. This artifact demonstrates how critical thinking and determination can lead to successful technical outcomes.

Artifact 2: Linux – Basic Network Configuration Assignment

Another artifact that highlights critical thinking is my Linux Basic Network Configuration Assignment from Linux Systems for Cybersecurity. Learning Linux was initially intimidating, as I had to navigate an unfamiliar operating system using command-line tools while configuring network settings. This assignment required me to break down complex problems, research solutions, and systematically apply commands to achieve successful network configuration. Working through this assignment strengthened my problem-solving abilities and persistence. I had to analyze errors, test commands, and understand the underlying system architecture to ensure proper functionality. This experience reinforced that critical thinking is essential in cybersecurity, where technical challenges often require both creativity and structured reasoning. Completing this assignment successfully solidified my understanding of Linux systems and prepared me to handle real-world IT and cybersecurity scenarios.

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Artifact 3: Introduction to Network Security – Wiring a Patch Cable

In my Network Security course, I faced the challenge of wiring a patch cable—a task I had never attempted before. This hands-on assignment tested my attention to detail, patience, and problem-solving skills. By carefully following instructions, analyzing potential errors, and seeking practical solutions, I successfully completed the project and confirmed its functionality by testing it with my dad.

This artifact reinforced that critical thinking extends beyond software or code; it also applies to practical, hands-on technical tasks. Understanding how network components connect and function together requires analytical reasoning, persistence, and a willingness to learn from mistakes. It also demonstrated the value of combining theoretical knowledge with real-world application, which is crucial for professional success in IT and network security.

Research, Writing, and Organizational Skills

Artifact 4: Windows Systems Management and Security – Research Paper

My research paper on the evolution of Windows Server showcases the development of my writing, research, and organizational skills. This paper required a thorough analysis of Windows Server from its earliest version, Windows NT 3.1 Advanced Server, to Windows Server 2022. I explored its technological evolution, cybersecurity implications, and role as a critical backbone for enterprises worldwide.

Conducting this research involved gathering credible sources, analyzing technical information, and synthesizing insights into a coherent and structured report. I learned to organize my findings effectively, communicate complex technical concepts clearly, and present arguments in a logical,

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professional manner. This artifact reflects my ability to combine technical knowledge with strong writing and organizational skills, skills that are essential in professional environments where clear communication of research and technical analysis is critical.

Artifact 5: Online Deviance Investigation Project

In my Online Deviance course, I conducted a personal investigation using OSINT (Open Source Intelligence) tools. This project required careful research, attention to detail, and analytical reasoning to collect and evaluate publicly available information. By following investigative procedures and documenting my findings, I gained hands-on experience in digital intelligence gathering.

This artifact highlights my organizational skills and ability to apply investigative methods systematically. The project demonstrated how attention to detail and careful planning are critical in both cybersecurity and criminal justice contexts. It also reinforced the interdisciplinary nature of my education, as I combined technical knowledge, analytical thinking, and research skills to complete the assignment successfully.

Artifact 6: Social Science and Crime Mapping Project

Another project that strengthened my research and analytical abilities was the Crime Mapping Project in Social Science and Crime Mapping. Using GIS tools, I mapped domestic violence incidents during hurricanes to analyze potential correlations between natural disasters and crime patterns.

This project required meticulous data collection, analysis, and visualization. I developed skills in interpreting geographic and social data, organizing findings, and presenting complex information in an understandable format. The project demonstrates how interdisciplinary skills—combining

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social science research methods with technology tools that can provide actionable insights, a skill directly applicable to careers in criminal justice, cybersecurity, and public safety.

Technical Skills

Throughout my academic journey, technical proficiency has been a central focus. Artifacts such as the Python Socket Programming Project, Linux Network Configuration Assignment, and patch cable wiring assignment showcase hands-on experience in programming, system administration, and networking. Each project reinforced my understanding of core technologies and required practical problem-solving skills.

Working in Python strengthened my coding abilities and ability to apply logic in real-world scenarios. Linux assignments taught me system navigation, command-line proficiency, and network configuration—key skills in IT and cybersecurity. Network tasks, such as wiring a patch cable, demonstrated the importance of precision, troubleshooting, and practical application of theoretical knowledge. Collectively, these artifacts highlight my technical competence and readiness for careers requiring hands-on IT and cybersecurity expertise.

Conclusion

Overall, my college journey has been defined by a continuous process of learning, adapting, and applying knowledge across diverse disciplines. The artifacts included in this ePortfolio demonstrate my growth in critical thinking, technical skills, research, writing, and organizational

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abilities. I have learned to tackle complex challenges, persist through difficulties, and approach problems from multiple perspectives.

Interdisciplinary learning has been essential in developing a comprehensive skill set. By integrating knowledge from IT, cybersecurity, criminal justice, cybercrime, and social sciences, I have gained a holistic understanding of technical and investigative processes. These experiences prepared me for professional challenges by teaching me to combine analytical reasoning, technical expertise, and effective communication.

Reflecting on this journey, I am confident in my readiness to enter the workforce. My technical proficiency, critical thinking, and research abilities are complemented by strong organizational and collaborative skills, all of which are necessary to succeed in IT, cybersecurity, and criminal justice fields. This ePortfolio not only highlights my academic achievements but also serves as a testament to my growth as a capable, interdisciplinary thinker prepared to contribute meaningfully to any professional environment.