

Reflection Essay

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Throughout my degree program, I have developed a wide range of skills that extend beyond a single discipline, reflecting the interdisciplinary nature of my studies. Courses in cybersecurity, communications, social sciences, and writing have collectively shaped my ability to analyze complex problems, communicate effectively, and think critically about technology and its role in society. Rather than learning skills in isolation, I have come to understand how different academic disciplines intersect and complement one another. Technical cybersecurity knowledge, combined with ethical reasoning, research writing, and an understanding of human behavior, has prepared me to approach real-world challenges more comprehensively. This essay reflects on the key skills I have developed, the assignments that helped me build them, and how these interdisciplinary experiences connect to my future career goals.

One of the most important skills I developed in my program is critical thinking, particularly in analyzing cybersecurity incidents and strategies. A key artifact that demonstrates this is my case analysis assignments, such as my work on Stuxnet and information warfare. These assignments required me to go beyond simply describing events and instead evaluate their ethical implications, strategic significance, and broader impact. Through these projects, I learned how to break down complex cyber incidents into smaller components: technical actions, political motivations, and ethical consequences. Courses in cybersecurity provided the technical foundation, while interdisciplinary studies introduced frameworks such as just war theory and the ethics of care. Initially, I struggled to connect these theories to real-world cyber events, but over time, I learned to apply them systematically. For example, when analyzing Stuxnet, I considered both its strategic purpose and the unintended consequences of its spread, weighing whether the action could be ethically justified. This skill is highly relevant to my career goals, as cybersecurity professionals are often required to assess threats, risks, and responses under

uncertain conditions. Job descriptions in cybersecurity frequently emphasize analytical thinking and the ability to evaluate complex situations. My interdisciplinary training has given me a stronger foundation for this type of work, allowing me to consider both technical and human factors.

Another major skill I developed is research and academic writing, particularly through assignments like article reviews and reflective essays. My work on topics such as digital human rights and everyday sexism required me to engage with scholarly sources, synthesize information, and present clear arguments. In these assignments, I learned how to evaluate sources for credibility, identify key arguments, and organize my thoughts into a structured paper. Courses like IDS 300W played a critical role in building this skill, as they emphasized writing as a process rather than a one-time task. Drafting, revising, and incorporating feedback helped me improve my clarity and precision. What made this skill interdisciplinary is the variety of subjects I wrote about. Writing about cybersecurity policies required a different approach than writing about social issues, yet both relied on the same foundational skills of research and argumentation. I also began to see how communication is essential in every field. Even the most advanced technical knowledge is ineffective if it cannot be clearly explained to others. This skill directly connects to my career goals, especially in roles that involve reporting, documentation, or communication within cybersecurity teams. Many job postings highlight the importance of writing reports, explaining risks, and communicating findings to both technical and non-technical audiences. My experience in academic writing has prepared me for these expectations.

A key interdisciplinary component of my program has been understanding how human behavior and social systems interact with technology. This skill is reflected in assignments such

as my analysis of Cambridge Analytica and discussions on information warfare in my PHIL 355E class. These projects required me to examine how data, psychology, and media influence public opinion and decision-making. Through these experiences, I learned that cybersecurity is not just about systems and networks; it is also about people. Social science courses introduced concepts such as persuasion, bias, and social influence, helping me understand how information can be used as a weapon. At first, I approached cybersecurity from a purely technical perspective, but these assignments shifted my thinking. I began to see that many cyber threats exploit human vulnerabilities rather than technical flaws. To complete these assignments, I had to integrate knowledge from multiple disciplines. For example, analyzing Cambridge Analytica required understanding data collection methods, psychological targeting, and political strategy. I learned to connect these ideas and explain how they contribute to broader issues, such as election interference. This skill is especially valuable in today's cybersecurity landscape, where social engineering and misinformation are major concerns. Employers are increasingly looking for individuals who understand the human side of cybersecurity, including how users interact with technology and how attackers exploit behavior. My interdisciplinary education has given me an advantage in this area.

Problem-solving is another critical skill I developed throughout my program, particularly in hands-on cybersecurity assignments and case studies. Whether analyzing a network vulnerability or working through a complex scenario, I learned how to approach problems methodically and adapt when initial solutions did not work. One example of this is my work on cybersecurity labs and incident analyses. These assignments often required trial and error and the ability to learn from mistakes. I developed a process of identifying the problem, researching possible solutions, testing them, and refining my approach. This iterative process helped me

become more resilient and confident in tackling unfamiliar challenges. Interdisciplinary learning played a significant role in this skill. Technical courses taught me specific tools and methods, while other courses emphasized logical reasoning and structured thinking. For example, writing assignments improved my ability to organize my thoughts, which translated into more effective problem-solving in technical contexts. This skill is essential for my career goals, as cybersecurity professionals frequently encounter new and evolving threats. Job descriptions often highlight adaptability and the ability to respond to unexpected situations. My experiences in problem-solving have prepared me to handle these challenges and continue learning in a rapidly changing field.

Finally, I developed strong communication and leadership skills, which are essential in both academic and professional settings. Assignments such as presentations and group discussions helped me learn how to convey ideas clearly and work effectively with others. In courses that required presentations, I had to explain complex topics in a way that was understandable to my audience. This required not only knowledge of the subject but also an awareness of how to engage listeners. I also learned the importance of confidence and clarity when speaking. Leadership skills were developed through collaborative work and my interest in structured environments like ROTC. I learned how to take initiative, organize tasks, and support team members. These experiences taught me that leadership is not just about giving orders but also about communication, accountability, and adaptability. This skill is directly relevant to my career goals, especially in roles that involve teamwork and coordination. Cybersecurity is rarely an individual effort; it requires collaboration between different departments and stakeholders. Employers value candidates who can communicate effectively and contribute to a team environment.

Overall, my degree program has provided me with a diverse set of skills that reflect the importance of interdisciplinary learning. By combining knowledge from cybersecurity, social sciences, and communication studies, I have developed a more comprehensive understanding of both technical and human-centered challenges. Interdisciplinary methods were essential in helping me connect different ideas and apply them to real-world situations. Rather than viewing each course as separate, I learned to integrate concepts and use them together. Courses like IDS 300W were especially important in preparing me for this approach, as they emphasized critical thinking, writing, and the ability to make connections across disciplines. I also learned to actively engage in my coursework by asking questions, revising my work, and applying feedback. This process helped me grow not only as a student but also as a problem-solver and communicator. Each assignment contributed to my development, building skills that are directly applicable to my future career. Being an interdisciplinary thinker is especially important in cybersecurity, where challenges are complex and constantly evolving. Technical knowledge alone is not enough; professionals must also understand human behavior, ethical considerations, and effective communication. My education has prepared me to approach problems from multiple perspectives, making me more adaptable and capable in my field. In conclusion, the combination of skills, courses, and interdisciplinary learning experiences in my program has equipped me with the tools I need to succeed in my career. By integrating knowledge across disciplines, I have developed a stronger foundation for analyzing problems, communicating solutions, and contributing meaningfully to the field of cybersecurity.

