Cybersecurity Professional Career Paper: Title of the paper

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Introduction:

Stopping to think how much of the modern person's life is held in the nebulous cyber world would put a damper on anyone's day. Our lives are atomized then converted to data points to be scattered across the globe in clandestine hard drives packed in warehouses. The importance of protecting our digital lives has proportionally gone up with the rise of the amount we put out there. The need for cyber security will continue to grow as more fields allow the digital to metastasize. The focus of this paper will be to look at the world of digital forensics and how it intersects with sociology.

Social science principles

Relation to Career : Digital forensics is an interdisciplinary field that pulls from social sciences and STEM fields.

A lot of prospective STEM graduates and nascent amateurs think that they can overlook the social sciences but they are important for understanding the behavior of criminals. On the flip side a defense architect would be hopelessly lost without considering the driving factors behind human decisions. Like how the human condition emphasizes convenience and will undermine security to take short cuts, “Among other

reasons, this is because while end-users are often aware of the security threats they may be confronted with, they also must perform their job duties in a timely manner" (Gwenhure,2025) To find solutions studies must be conducted to analyze this human factor, "Many of these cyberattacks are attributed to vulnerabilities associated with human actors within the organisation. For example, the incident at Volkswagen resulted from information stored in an unsecured file, and the attack on Colonial Pipeline was said to be caused by a re-used password."(Gwenhure,2025) This links back to digital forensics as vital clues hide within the minds of the culprits and their actions.

Application of Key Concepts

Relation to Career :

Digital forensics overlaps with key social sciences like criminology and psychology. The need to be able to dissect physical data comes hand in hand with the need to be able to understand the motives behind each action. Not to mention the political boundaries that one must cross when international crimes are committed,"One of the main issues of cross-border investigations is the collection and exchange of electronic evidence, which is often located in multiple countries, requiring external access to it. While being a priority for most countries, there are many unsolved issues due to the different regulatory frameworks of each country, which hinder collaboration due to, e.g. ethical, legal, or even procedural differences." (Prümmer et al., 2024)

Marginalization

Relation to Career : Digital detectives need to be aware of marginalized communities and how they are targeted.

The most marginalized groups in society are always gonna be the most vulnerable and this extends to their ability to combat digital threats. As has been seen before queer communities can be at greater risk in this increasingly polarized digital world, “The threats mostly aimed to shut down events for transgender rights and drag performances, which have become frequent targets of extremists, militias and far-right personalities during June, which is Pride Month.” (Collins & Madani, 2022) These threats can also be harder to deal with as marginalized groups will have disproportionally fewer avenues for recompense.

Career Connection to Society

Relation to Career : Like detectives, digital forensics specialists are needed to track down criminals and solve cases.

Without cyber security professionals our valuable infrastructure would be left exposed and vulnerable. The need for fast and responsive teams to address bad actors is growing. Places like hospitals have crucial infrastructure that necessitates cyber defense. Digital crimes require specialized police officers who can act with certainty online. Digital detectives are a necessity for the modern world.

Conclusion:

The field of digital forensics takes an interdisciplinary approach and uses political science, psychology, and criminology to interact with the modern digital crimescape. The world has changed and now the digital spaces are integrated into the physical ones necessitating a browser force. This does not mean that they can forget about society as they are an important bedrock of safety. Protecting affected marginalized groups and

solving crimes are still a part of their job. This makes digital forensics an exciting and evolving field.

Scholarly Journal Articles

Anderson Kevin Gwenhure, University students' security behavior against email phishing attacks: insights from the health belief model, *Journal of Cybersecurity*, Volume 11, Issue 1, 2025, tyaf034, https://doi.org/10.1093/cybsec/tyaf034

Julia Prümmer, Tommy van Steen, Bibi van den Berg,

A systematic review of current cybersecurity training methods,

Computers & Security,

Volume 136,

2024,

103585,

ISSN 0167-4048,

https://doi.org/10.1016/j.cose.2023.103585.

Collins , B., & Madani, D. (2022, June 18). *What's behind threats to LGBTQ events? "a very orchestrated attack machine."* NBCNews.com. https://www.nbcnews.com/tech/tech-news/anti-lgbtq-threats-orchestrated-on-internet-shut-down-events-rcna33955