

Cybersecurity Professional Career Paper: Digital Forensics Analyst

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Introduction

Having a background in law enforcement, I've always had an interest in computer forensics. Digital forensic analyst is a career I would want to pursue in the near future. A digital forensic analyst gathers information, analyzes it, and investigates security attacks to then bring to law enforcement to possibly use in court. In the modern world, this career is important to cybersecurity because it's the defense for those who are victim to cybercrimes and without them, they wouldn't be held accountable. Throughout this paper it will emphasize the actions a digital forensic analyst has to take and how it correlates to the cybersecurity world.

Social science principles

The criminal justice system and digital forensic analysts work hand in hand when it comes down to investigating cybercrimes. An analyst would need to have an unbiased mind when looking at the offenders and handling the case. By doing this it can "ensure that our nation's criminal justice practitioners are maximizing the use of ever-evolving developments in the forensic sciences" (Browning 2015). When investigating a cybercrime, evaluating the human behavior of why they committed the crime is very important. This falls back to module two and describes empiricism, where they study behavior and agree to not rely on opinions to shape our understanding on cybercrime.

Application of Key Concepts

In module four it discusses how psychology play such a vital role in cybercrimes and cybersecurity. Psychology is used in cybersecurity to study the human behaviors of a criminal. It's very valuable for analysts to know the why behind their behavior and what is it that drives them to do these crimes. However, there are also psychological factors that increase the risk of

cyber victimization which is an individual that experiences harmful behavior online. A digital forensic analyst studies these behaviors to help improve and setup a successful investigation.

Marginalization

In places that are still learning how to use technology for educational purposes or other motivational uses are targeted the most. Cybersecurity “is a digital skill that is affected by socioeconomic and digital inequalities” (Khan 2023), so cyber threats thrive in these areas especially with the younger generation. Being a digital forensic analyst it’s important to acknowledge this behavior as it can be stopped and learned from for future incidents.

Career Connection to Society

In financial, healthcare, and government systems a digital forensic analyst protects the data held in these systems by analyzing and investigating cybercrimes. This goes to show how valuable and important a digital forensic analyst is to cybersecurity. Without them who will conduct the “recovery, analysis, documentation, and safeguarding of cybercrime evidence on computers, networks, and other data storage devices” (Excelsior 2024).

Scholarly Journal Articles

Excelsior Staff. (2024, December 15). *Career Spotlight: Digital Forensics Analyst*. Excelsior University. <https://www.excelsior.edu/article/career-spotlight-digital-forensics-analyst/>

Browning, K. (2015, July 1). *Social Science Research on Forensic Science: The Story Behind One of NIJ's Newest Research Portfolios*. National Institute of Justice. <https://nij.ojp.gov/topics/articles/social-science-research-forensic-science-story-behind-one-nijs-newest-research>

Khan, N. F., Ikram, N., & Saleem, S. (2023, April 22). *Effects of socioeconomic and digital inequalities on cybersecurity in a developing country*. National Library of Medicine. <https://pmc.ncbi.nlm.nih.gov/articles/PMC10122089/>