

Makayla G.A Thomas

Bora Aslan

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Digital Forensic Analyst and Social Principles

Intro

Cybersecurity is the protection and security of databases and systems from cyberattacks, threats, and risks. Cybersecurity professionals work together to combat and mitigate those attacks, threats, and risks by implementing various cybersecurity measures and policies.

Cybersecurity is a broad field, so there are many careers one could choose from. Specifically, we will discuss the profession of a Digital Forensic Analyst and the correlation between social science principles and research that helps these professionals in their careers.

Digital Forensic Analysts

While Forensic analysts and Digital Forensic Analysts have many similarities, Digital Forensic Analysts work within cyberspace to analyze and investigate any cybercrime that may have occurred. Digital Forensic Analysts collect, analyze, and explore data to obtain knowledge and insight on cybercrimes and the cybercriminals involved. "Digital forensic analysts work on cybercrime investigations and are often hired in the aftermath of a hack, data breach, or theft of a digital storage device. The job of a digital forensic analyst is multifaceted and encompasses a variety of responsibilities." (EC-Council).

Since Digital Forensic Analysts deal with cybercrimes and cybercriminals daily, it is evident that they work for law enforcement ranging from state to federal governments.

Digital Forensics and the Social Sciences

The daily implementation of analyzing cybercriminals and their everyday exploitation of databases and systems allows Digital Forensic Analyst to learn more about their tactics and the minds behind the operations. There is a huge social aspect when it comes to the Digital Forensics profession because these people work with cybercriminals daily, allowing this profession to fall under the social sciences of criminology and sociology.

When applying social science principles to the profession of a Digital Forensic Analyst, we will notice many principles in which one operates in this field, including determinism, empiricism, and ethical neutrality. Since Digital forensics's main job is to analyze data, it is also crucial for them to study and analyze the behavior of the cyber criminals in relation to the crimes they're trying to solve. Determinism within Digital Forensics allows the analyst to analyze human behavior patterns, leading to understanding the motives behind the cyber crimes, attacks, and threats committed and the procedures one should take to mitigate those risks. Empiricism is based on the senses; Digital Forensics see numerous amounts of data daily through their collections and investigations. Based on the data collected from the analyst, we can also gain more insight into the behavioral process of cybercriminals and why they attack, which also gives a significant amount of evidence. Lastly, the social principle of ethical neutrality manifests itself as the privacy and security of the data, evidence, and statistics the analyst finds. As mentioned

earlier, Digital Forensic Analysts are likely to work with government officials, so it is beneficial for those individuals to keep the information confidential and have ethical attitudes behind their findings.

The Common Target

People who work as Digital Forensic Analysts are ethical people who want nothing more than to help people within our society, especially those from marginalized groups. Within the cyber realm, it is known that anyone can be a target and vulnerable to the attack and threats of a cybercriminal. Still, the people most affected are those with marginalized demographics.

"Marginalized groups are not only impacted differently by DFS-borne harm; they are also increasingly targeted for online fraud and financial abuse or exploitation" (Anthony. A). This is an ongoing scheme within the cyber realm that individuals like Digital Forensic analysts fight daily to mitigate, prevent, and terminate from happening.

Conclusion

In conclusion, many social principles work in tandem with digital forensic analysts. Not only do they study and analyze data within databases and systems to mitigate and protect individuals from cyber attacks, but they also study the behavior patterns of the criminals to know what's to happen next and how they can be a few steps ahead. Analysts prioritize both cybercriminals and their victims to create a space of comfort and security for one and ethically hold the other accountable for their actions.

References

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