

Cybersecurity and the Social Sciences (CYSE 201S)

School of Cybersecurity

Old Dominion University

Instructor: Diwakar Yalpi

Student: Charles Martin

April 7, 2024

Career Paper

Today, companies are constantly threatened by cybersecurity attacks, with even a single email capable of toppling a thriving business worldwide. In this landscape, Cybersecurity Analysts stand as the first line of defense, the ones who can prevent such falls. Their role is not just about reacting to attacks but about understanding the human element in these attacks and taking proactive measures to prevent them. In this analyst position, the relationship between the social sciences and Cybersecurity is the key to their success in preventing and solving attacks. It's not just about protecting businesses but also about recognizing and safeguarding marginalized people around the globe as the essential individuals they are.

The nexus of cybersecurity and the social sciences is paramount for Cybersecurity analysts in executing their duties. They are tasked with monitoring and preventing attacks or threats in a network or system, which would be insurmountable without the insights gleaned from the study of social science. Without this crucial discipline, the field would be ill-equipped to anticipate or strategize against the attacks orchestrated by criminals seeking to infiltrate or manipulate their systems. "Social cybersecurity uses computational social science techniques to identify, counter, and measure (or assess) the impact of communication objectives." (Carly, 2020) This is similar to the objectives of a cybersecurity analyst in the field.

The adage 'know your enemy' resonates deeply in this career, as a profound understanding of criminology and psychology is indispensable. The ability to delve into a criminal's mindset to recognize their humanity can fortify a network by identifying potential vulnerabilities that could be exploited.

This position is an excellent way for marginalized people to enter the world of cybersecurity. Not only is it a start in the field, but it is also possible to get into it without a degree for those who don't have the money to go to college. "This job is often an entry-level job in the world of cybersecurity." (Burnett, 2021) Getting your certifications to start is a great way to get into the position and is a lot cheaper than starting a career in this through college. Not only does being an analyst as a marginalized person help, but it will also strengthen the cybersecurity field through diversity. It also protects them and others like them by having the experience of knowing what to protect them from. In a Carnegie article that studies the vulnerability of Marginalized people, specifically in Africa, the lower you are on the socio-economic ladder, the more at risk you are to be exploited and successfully attacked. (Anthony, 2023) The more we incorporate the minority in cybersecurity, the better the performance of keeping them safe.

In Conclusion, Cybersecurity Analysts are at the forefront of the entire field. Understanding human nature and the threats that exist in today's world is vital to everyday life. It's an excellent position for marginalized people to pursue a career in this workforce. It gives them the power to keep themselves and others safe and provides companies with the strength in diversity that they need to be successful.

References

- Anthony, A. (2023, March 13). *Cyber Resilience Must Focus On Marginalized Individuals, Not Just Institutions*. Retrieved from Carnegie Endowment For International Peace:
<https://carnegieendowment.org/2023/03/13/cyber-resilience-must-focus-on-marginalized-individuals-not-just-institutions-pub-89254>
- Burnett, J. (2021, January 17). *Is the CySA+ Worth It?* Retrieved from CBTnuggets:
<https://www.cbtnuggets.com/blog/certifications/comptia/is-the-cysa-worth-it>
- Carly, K. M. (2020). Social cybersecurity: an emerging science. *Computational and Mathematical Organization Theory*, Volume 26, 365-381.