An Ounce of Prevention…Is Cybersecurity the Cure For Cyber Attacks?

Project Title	An Ounce of Prevention…Is Cybersecurity the Cure For Cyber Attacks?
Project Summary	In 2018, NCSC reported a significant increase in cyber-enabled economic espionage. Hackers are clearly using cyberattacks to achieve a range of potential effects -- is preventing a cyberattack a worthy investment when compared to the total costs of recovering from a cyberattack?
Country	United States

Project Description

The National Counterintelligence and Security Center (NCSC) is seeking virtual interns with a strong interest in cybersecurity to identify cybersecurity best practices across the federal enterprise, academia, and the private sector. This open source research project will require an understanding of the most recent and sophisticated cyberattacks as well as a review of cybersecurity prevention measures that could potentially thwart such attacks.

As stated in the National Counterintelligence Strategy for 2020 – 2022, “artificial intelligence, quantum computing, nanotechnology, advanced materials, improved encryption, robotics, and the Internet of Things will likely enable our adversaries to develop sophisticated intelligence capabilities to target the United States and make it more difficult to defend against their activities.” We must incorporate these technological advances in a secure manner that does not allow our adversaries to take advantage of US interests in cyberspace.

Not only will this project reveal the latest cybersecurity techniques and practices to thwart hostile cyber actors, it will illuminate the cost benefits of implementing cybersecurity practices. The results of this research will assist NCSC in promoting cybersecurity best practices across the federal enterprise to reduce the risk of cyberattacks. Moreover, if such practices are implemented at the federal level, such initiatives can influence stakeholders in the private sector and academia who have suffered significant losses in intellectual property and research and development investments.

Your job will be to leverage your school's resources to review open source materials to analyze and report on cybersecurity best practices. We are not seeking a simple catalog of cybersecurity best practices; rather, we need a comparative analysis on what practices work best to prevent certain cyberattacks, what techniques are trending and why, and what is the total cost of implementation compared to the total cost of recovering from a cyberattack. You will work in direct support of NCSC's Supply Chain Senior Program Experts, who will provide more detailed guidance and feedback on your work. This will allow you an opportunity to see what areas policymakers are focused on throughout the year and how these efforts will shape federal cybersecurity policy to better protect our supply chains.

In addition to the knowledge you will bring to NCSC, this opportunity will serve as an excellent introduction to the CI and Security domain, helping to build an enduring relationship with professionals with broad networks in the field while shaping and advancing your career aspirations.

Required Skills or Interests

Skill(s)
Data analysis
Research
Writing

Additional Information

You will be one of our virtual interns on the SCD team whose members are charged with working across the federal enterprise, and therefore adept at remote engagement. We will ensure you are integrated into the team to the fullest extent possible…while also realizing that you are a student!

Language Requirements

None