Jacob Hartman

https://j2h2.com

jacob@j2h2.com

Utica, NY

I'm a dedicated, flexible cybersecurity engineer, with my top interests being software development, malware analysis, threat emulation, and penetration testing. I love to learn about the latest cybersecurity developments, seeking opportunities to further my team's capabilities as well as my own knowledge and skills.

Skills

- Development in C/C++, Python, PHP, JavaScript, Node.js, and Go programming languages (flexible to learn other languages as needed)
- Software development processes such as Scrum, DevOps, and continuous integration/continuous delivery (CI/CD)
- System security testing and penetration testing of network applications, web applications, integrated systems, Linux, Windows, and IoT devices
- Vulnerability discovery, analysis, and exploitation on Windows, Linux, and IoT devices
- Reverse engineering with Ghidra and Cutter and RE tool automation
- Cyber threat emulation and security analysis validation
- Extensive experience with Linux and Windows
- Malware analysis with static and dynamic analysis tools
- Web development with Vue.js, JavaScript, HTML5, and CSS
- Linux systems administration and security hardening

Employment History

Assured Information Security - Rome, NY

Software Engineer, June 2016 - Present

Performed multiple duties, including software development in Python, C++, and Javascript, penetration testing of computer systems and software, threat emulation, reverse engineering, malware analysis, incident response, CI/CD automation, and systems administration. Worked on projects such as the Metasponse incident response framework and led a team for the Mockingbird malware analysis system. Also worked as a member of a Cybersecurity Evaluation Team (CSET) to test the security of various software systems.

Co-op, Oct. 2014 - June 2016

Assisted in the software development process and helped to develop new features and functionality in security software. Worked part-time while a full time college student.

DAMOMICS Inc. - Elmira, NY

Summer Intern, June - August 2014

Updated and helped maintain company website. Added customizations to Counterpoint POS to fit customer needs. Wore multiple hats to do network and Windows server administration work.

SUNY Institute of Technology - Utica, NY

Work Study in Public Relations, Sept. 2012 - April 2014

Assisted in maintaining school website content. Made adjustments to school's in-house PHP content management system. Helped to develop Wordpress instances for new website features.

Security Clearance

Information available upon request

Education

Georgia Institute of Technology - Atlanta, Georgia

MS in Computer Science

Graduated May 2024

SUNY Polytechnic Institute - Utica, NY

BS in Network and Computer Security, BS in Computer Science

Graduated Cum Laude May 2016

Community Activities

CNY Hackathon Red Team

Work with a volunteer team to create different competition virtual machines as well as operate as a member of the competition's red team.

NCAE Hackathon Developer and Red Teamer

Work with team of professionals to develop capabilities to improve the learning environment for students in a nationwide series of competitions. Build tools to exploit and controls systems to push students to think fast and on theri feet.

Side Projects

HoneyPoke

A simple honeypot that simply records inbound traffic. Data can be pushed to data storage like ElasticSearch for further analysis and pattern detections.

Kogia

A flexible, modular Python framework for malware analysis. Provides a web interface for submission and results viewing as well as a plugin system for rapid extension of analysis capabilities.

Malleus

A simple-to-use web UI to provide quick student access to educational labs and cyber-ranges. Focuses on providing a portable, lightweight environment for workshops and smaller events.

Other projects can be viewed at: https://j2h2.io

Other Activities

- Piano
- Music composition
- Gardening