

Joey Perme

jp@jper.me
Cleveland, OH

<https://jper.me>
<https://linkedin.com/in/joeyperme>

Professional Experience

Nuro November 2021 - Present
Security Engineer

- Ensure high security and safety bar prior to major company deployments and milestones.
- Reverse engineer hardware and software to develop implementations for novel exploit concepts.
- Perform both black and white box penetration tests on hardware, software, and infrastructure.
- Provide and drive expert remediation working with all relevant stakeholders.

AWS (Amazon Web Services) June 2021 - November 2021
Security Engineer

- Reviewed designs and architectures ensuring high security bar for new AWS features and services.
- Threat modeled new features of internal and external-facing AWS services.
- Worked with service teams to mitigate and learn from potential vulnerabilities.
- Participated in on-call rotations for imminent security reviews.

Alarm.Com July 2020 - May 2021
Security Engineer

- Penetration tested devices and software using reverse-engineered intel.
- Automated stages of pentest/reverse engineering via authored software increasing throughput.
- Performed chip desoldering, firmware dumping, custom file unpacking, and reverse engineering.
- Operated devices in an instrumented environment to understand behavior and uncover vulnerabilities.
- Summarized findings in proof-of-concepts and write-ups presented to management stakeholders.
- Participated in on-call rotations and incident response as on-call security point-of-contact.

CERT at SEI, Carnegie Mellon University January 2020 - June 2020
Associate Security Researcher

- Researched the functionality of emerging and existing technologies at all constituent logical layers.
- In support of stakeholders throughout the US Government, advised on the implications of findings.
- Delivered concise, rigorous prototype implementations and formal reports.

Twilio May 2019 - August 2019
Software Engineer, Security (Internship)

- Partook in penetration tests, code reviews, and threat modeling for Twilio products and services.
- Created Dockerized application to scan Github PRs for security and other issues as they're committed.
- Designed system for custom Python scanner/plugin creation and runtime loading.

Personal Projects & Endeavors

- Reverse engineered smart power strip and used found replay attack for automation of personal garden.
- Scripted stable build and install of SoapySDR, LimeSuite, GNU Radio, OsmoSDR, and gqrx for SDR lab.
- Reverse engineered Robinhood API for custom clients, and portfolio tracking and management.

Education

University of Dayton
Master of Computer Science, 3.833 December 2019
Bachelor of Science, Computer Science, 2.918 May 2016
Offensive Security EXP-100 (Fundamentals of Exploit Development) In-Progress
Offensive Security EXP-301 (Windows Usermode Exploit Development/OSED) In-Progress

Personal Interests & Achievements

Outstanding Service to the Department – University of Dayton CPS Dept. May 2016
Given to the student who goes above and beyond to help the department and the students.