

## ABOUT ME

---

### Technical Skills

- Docker, Ghidra, Ida Pro, Wireshark, GDB, LLDB, Pwntools, Kali Linux, Sliver, Nmap, Ffuf, Vmware, Burp Suite

### Programming Languages

- Rust, Python, Go, Bash, C, x86 Assembly, ARM Assembly

## WORK EXPERIENCE

---

### Battelle Memorial Institute

May 2023 - Present

Reverse Engineer and Vulnerability Researcher

- Utilized static analysis and dynamic analysis tools to reverse engineer embedded devices and communication protocols.
- Engineered fuzzing harnesses to discover weaknesses and developed exploitation scripts to target vulnerable devices.

### Lawrence Livermore National Laboratory

May 2022 - May 2023

Cyber Security Intern — Cyber Testing for Resilient Industrial Control Systems

- Scripted Ghidra in Python to detect supply-chain components in firmware for industrial control systems.
- Utilized machine learning techniques such as random forests and clustering to compute similarities between binaries.

### Honeywell Global Security

May 2021 - August 2021

Cyber Security Intern — Vulnerability Management Team

- Performed vulnerability audits for over 300,000 assets including over 900 web applications and consulted internal development teams to remediate vulnerabilities.
- Automated the generation of client-readable reports from Rapid7 InsightVM and Qualys WAS vulnerability scan data.

### ASU Research Enterprise

November 2020 - May 2021

Student Developer — Research Consultant

- Designed and deployed an IoT hacking and cybersecurity course and trained over 20 US veterans and Navy ROTC students.
- Demonstrated drone hacking, radio replay attacks, WIFI attacks, hardware hacking, and firmware exploitation.

## EDUCATION

---

### Arizona State University

August 2019 - May 2023

- B.S. Computer Science — GPA: 3.96

### Certifications

- CompTIA A+ (2020)
- CompTIA Network+ (2021)

## ACTIVITIES

---

### Hack The Box

August 2019 - Present

Rank: Hacker

- Played CTFs to learn web app reconnaissance and exploitation, privilege escalation techniques, and offensive tooling.
- 📄 <https://www.hackthebox.eu/profile/171856>

### Pwn College

August 2022 - Present

Rank: Yellow Belt

- Played CTFs to learn binary exploitation techniques such as ROP, JIT spraying, and sandbox escapes.
- <https://pwn.college/hacker/233>

### Western Regional Collegiate Cyber Defense Competition

January 2021 - April 2023

Blue Team Member

- Hardened Linux machines, patched misconfigured services, and participated in incident response to isolate cyber threats.
- Represented ASU and placed 3rd in the 2022 and 2023 Western Regional competitions.

### DevilSec

August 2019 - May 2023

Officer — Secretary

- Gave talks on red team methodologies, penetration testing tools, and network security.
- Developed and deployed Hack The Box-style CTF challenges for club members in a Docker environment on AWS.