

CLEARANCE

Top Secret SCI with CI polygraph

EDUCATION

SENIOR SOFTWARE ENGINEER

Specialty: Unix Access

October 2021 | Fort Gordon, GA

BASIC OFFICER LEADER COURSE

March 2019 | Fort Gordon, GA

JUNIOR SOFTWARE ENGINEER

October 2018 | Fort Gordon, GA

CLEMSON UNIVERSITY

B.S. Computer Science

May 2018 | Clemson, SC

SKILLS

TOOLS

ghidra • binaryninja • afl++
gdb • pwntools • objdump
nasm • binwalk • centrifuge
git • PyPi • strace • angr

ENVIRONMENTS

VMWare • Qemu • Docker
Proxmox • lxc • Mayhem • pfsense
MikroTik • Cisco • Netgear

CERTIFICATIONS

Mission Commander • MTCNA
CCNA • MTCRE
SEC+ • CEH • VHL

LANGUAGES

PROGRAMMING

Every day:

Python • C • x86/x64 • bash

Frequently:

C++ • Arm • Arm64 • cmake • make

Familiar:

MIPS • PowerPC • TileGX • GO

INTERPERSONAL

English • German

OBJECTIVE

Driven senior software engineer with a security specialty seeking new challenges architecting software systems.

EXPERIENCE

U.S. ARMY CYBER

Senior Software Engineer | Fort Gordon, GA | October 2021 - Present

- Discovered three unpublished vulnerabilities saving the U.S. Army approximately \$750k
- Orchestrated two development projects ensuring the production of software products that fulfilled documented requirements from supported organizations
- Trained, mentored, and certified two aspiring basic capability developers to support ongoing operations with qualified personnel
- Produced three production ready technical solutions to support active mission requirements

U.S. ARMY CYBER

Software Engineer | Fort Gordon, GA | February 2021 - October 2021

- Identified unpublished exploitable vulnerabilities in targeted technologies
- Mentored three aspiring software engineers through the junior qualification process resulting in a 100% qualification rate
- Engineered fuzzing harnesses for Internet of Things devices to support fuzzing with various platforms resulting in the discovery of exploitable vulnerabilities
- Developed four operationally accepted capabilities that fulfilled documented requirements from Combat Mission Teams and other supported organizations

U.S. ARMY CYBER

Junior Software Engineer | Fort Gordon, GA | April 2019 - February 2021

- Developed nine software products saving the U.S. Army approximately \$1.3 million
- Mentored and evaluated three aspiring mission commanders ensuring the team has mission certified personnel
- Commanded 24 interactive cyber operations
- Submitted and tracked 100% more technical requirements than any other team which resulted in 18 new approved solutions

PERSONAL PROJECTS

Links to my projects and blog posts

- pwnc — a python library for automating libc exploitation
- handout — exploiting target binaries with seccomp enabled
- sbof — my journey into linux kernel exploitation and device driver development

ACHIEVEMENTS AND AWARDS

2021	3rd Place	CISA Presidents Cup Cyber Competition
2021	1x	Army Achievement Medal
2020	1x	Army Commendation Medal with "R" device
2019	1x	Army Commendation Medal with "R" device
2019	1st Place	Capability Solutions Detachment - Georgia Hackathon