Anthony Tropeano

anthony@wedefendit.com • 352.709.3931 • Ocala, FL • https://atropeano.com • https://github.com/iitoneloc

SUMMARY

Cybersecurity and software engineer with experience in systems, networking, virtualization, automation, full-stack development, delivering secure infrastructure and engineering solutions across academic, freelance, and entrepreneurial work.

SKILLS

Linux • Firewalls • UTM • Defensive Programming • Test-Driven Development (TDD) • SIEM • IDS/IPS • NSM • Malware Analysis • Subnetting & Network Segmentation • Python • Rust • C • JavaScript • TypeScript • SQL • NoSQL • React.js • Node.js • Next.js • Vite • Electron • Git/GitHub • Heroku • Vercel • HTML/CSS

EDUCATION

Dakota State University **Expected Dec 2027**

Master of Science • *Computer Science: Cyber Operations Emphasis*

University of Arizona **Dec 2025**

Bachelor of Applied Science • *Cyber Operations: Cyber Engineering Emphasis*

Summa Cum Laude • GPA: 4.0

EXPERIENCE

Defend I.T. Solutions, *Cybersecurity Engineer*

May 2025 – Present

Delivered SOHO security hardening, system migrations, and incident prevention; deployed a production website (React, Next.js, Tailwind, TypeScript); executed Proxmox-based Windows 10→11 migrations; and are actively developing a Rust-based SOHO UTM inspired by SAFE-PC for affordable SMB/home protection.

University of Arizona, *Cybersecurity Student Worker - Python Course Assistant*

Nov 2024 – Dec 2025

Supported students in debugging Python code, resolving IDE issues, and improving assignment outcomes. Delivered 1:1 and 1:Many guidance that increased engagement and comprehension. Identified recurring issues and provided targeted explanations to reduce repeated errors.

Self-Employed, *Freelance Full-Stack Developer*

Mar 2025 – Apr 2025

Rebuilt a legacy Wix site using React, Tailwind CSS, TypeScript, and Next.js for modern performance. Deployed to Vercel to increase speed, improve SEO, and eliminate hosting costs. Worked with the client to refine content and align the design with branding. www.petedejesse.com.

edX | 2U, *Full-Sack Web Development Grader*

Aug 2021 – Nov 2023

Reviewed student code for the MERN stack (MongoDB, Express.js, React.js, Node.js) and provided technical feedback aligned with industry standards. Verified assignment integrity and documented plagiarism cases. Ensured consistent evaluation across evolving curriculum updates.

LICENSES & CERTIFICATIONS

NSA Designated Cyber Operations Program Certificate • ***University of Arizona*** **Dec 2025**

Full-Stack Web Development Certificate • ***University of Central Florida*** **Aug 2021**

HONORS & AWARDS

Outstanding Senior Award Nominee • ***University of Arizona***
Distinguished Undergrad Scholar • ***University of Arizona***
Dean's List with Distinction • ***University of Arizona***
Honorable Mention • ***University of Arizona***
Chancellor's List • ***Purdue University Global***
President's List • ***Southern New Hampshire University***

PROJECTS

0xDL | ***Rust***

Born from SAFE-PC, 0xDL is an extensible OSS Rust library designed and prototyped for reliable, asynchronous file downloads, with optional integrity validation and per-chunk progress callbacks.

Repo: github.com/iitoneloc/0xDL. Crate: crates.io/crates/oxdl

PVEAUTO | ***Rust***

Born from SAFE-PC, pveauto is a prototype, OSS CLI/library that auto-downloads and verifies the latest Proxmox VE ISO for unattended installer workflows or verified downloads. Built on 0xDL, it significantly reduces download and verification times compared to SAFE-PC's Python implementation and relieves the end-user of verification.

Repo: github.com/iitoneloc/pveauto *Crate*: crates.io/crates/pveauto

SAFE-PC | ***Python, Proxmox, OPNsense, Suricata, Unbound, Linux***

BASCO Capstone Project. Prototype. Secure Automated Framework for End-of-Life PCs: automated conversion of x86_64 PCs into unattended SOHO security appliances, reducing manual setup time from ~2 hours to 15–47 minutes (60–87%).

Repo: github.com/iitoneloc/safe-pc

Defend I.T. Solutions Website | ***React.js, Next.js, TypeScript, Tailwind CSS, Vercel Hosting***

Designed, built, and deployed a professional website for a cybersecurity services company.

Live Deployment: www.wedefendit.com | *Repo*: github.com/defendit/defendit

THREADS Kernel | ***C***

Implemented portions of an OS Kernel, including Scheduling, Inter-process Communication, System Calls, Clock Driver, and Disk I/O operations.

Repo: github.com/iitoneloc/threads-kernel

Dependability Tracker | ***React.js, Next.js, TypeScript, Express.js, MariaDB, Heroku, Linux***

Internal tool for tracking employee callouts to identify potential shift-coverage gaps in real-time.

Demo Credentials: anthony@atropeano.com, d3MOmePlease!

Live Deployment: dependability-tracker.atropeano.com

Repo: github.com/iitoneloc/dependability-tracker