Youssef Sadek

• **(551) 241-8296** • **youssefsadekyis@gmail.com** • **Hazlet, NJ** • **LinkedIn** • **Github** • **Portfolio**

PROFESSIONAL SUMMARY

Computer Science student focused on Cyber Security. Hands on experience in penetration testing, IDS/IPS, vulnerability scanning, and enterprise security monitoring. Skilled in threat detection, scripting, and building scalable security platforms.

EDUCATION

Bachelor of Science in Computer Science   May 2022 - May 2026

New Jersey Institute of Technology   Newark, NJ

Relevant Coursework: Network Security, Cryptography, Operating Systems, Computer Networks, Intensive Programming in Linux

TECHNICAL SKILLS

- Languages: Python, JavaScript, C++, Java
- Tools: Kali Linux, Security Onion, Nessus, Nmap, VMware, SQL, Prisma, OpenVAS, Masscan, Tailscale, PagerDuty
- Concepts: Network Security, Vulnerability Assessment, Ethical Hacking, Distributed Systems

CERTIFICATIONS

Udemy: Complete Python Programming Certificate – Mar 2024

EXPERIENCE

Cybersecurity & Technical Operations Intern   Jun 2025 - Sep 2025

David Zwirner   New York, NY

- **Engineered** a global vulnerability monitoring system with backend APIs, frontend features, and automated scan workflows
- **Deployed** and **maintained Raspberry Pi scanning agents** (OpenVAS, Nmap, Masscan) for enterprise scale network testing
- **Conducted recurring vulnerability scans** on corporate networks, identifying bottlenecks and refining configurations
- **Collaborated via GitHub pull requests**, practicing professional code review, version control, and Agile teamwork
- **Applied enterprise best practices** in secure deployment, error handling, and system monitoring to strengthen operational resilience

PROJECTS

Enterprise Global Network Scanning & Vulnerability Monitoring System   Jun 2025 - Sep 2025

David Zwirner   New York, NY

Technologies: NestJS · Node.js · TypeScript · Prisma · SQLite · Masscan · OpenVAS (GVM) · Python · Cron Scheduling · React · PagerDuty · Vulnerability Management · Authentication & Security (Passport.js)

- **Engineered** a full stack vulnerability scanning platform with **NestJS, Node.js, Prisma, SQLite**, and **React**, enabling automated host discovery, assessment, and reporting
- **Orchestrated scanning pipeline** integrating **Masscan + OpenVAS (GVM)** via Python↔Node interop, scaling to **50,000+ hosts** with **30% faster throughput** and lower failure rates
- **Implemented cron based scheduling system to automate recurring vulnerability scans, improving reliability and cutting manual effort by >80%**
- **Integrated PagerDuty alerts** with retry/backoff for reliable escalation of **CVSS 8.9+ vulnerabilities**
- **Secured access** with **Passport based session authentication** and delivered a lightweight **React UI** for scan scheduling and results review.
- **Developed an automated setup script** to configure network scanning agents, streamlining installation of dependencies (Node.js, GVM, Prisma, npm) and cutting manual setup by **2+ hours per deployment**.

Cybersecurity Virtual Lab   Mar 2025 - May 2025

- Deployed a **3 VM lab environment** (Kali Linux, Security Onion, BasicPentesting1) using VMware for penetration testing practice
- **Detected and exploited 36 vulnerabilities**, including a ProFTPD backdoor, leveraging **Metasploit** for exploitation workflows
- Enhanced network defense by **validating intrusion alerts** in SGUIL and analyzing packet level threat data

Vulnerability Scanner Tool   Jun 2024 - Aug 2024

- **Built a multithreaded Python scanner** detecting **20+ common web vulnerabilities**, improving coverage and automation
- Optimized performance by **20%** with randomized headers and User Agent rotation to evade detection

Job Scraper Web App   Jun 2024 - Aug 2024

- Built a **Python based scraper** (Beautiful Soup, Requests) to extract **500+ LinkedIn job postings daily**