

Youssef Sadek

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

EDUCATION

Bachelor of Science in Computer Science May 2022 - Dec 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 and cutting manual setup by **2+ hours per deployment**.

GnosisLens Sep 2025 - Sep 2025
NJIT GirlHacks Hackathon Newark, NJ

- **Integrated Google Gemini 2.5 Flash API** for scam detection, boosting natural language fraud identification accuracy by **35%**
- **Built MongoDB aggregation pipeline** that processed **10,000+ purchase records**, enabling real-time analytics and user tracking
- **Developed RESTful API architecture** with **CORS configuration** and **session-based authentication**, reducing unauthorized access attempts by **40%**

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