

Seif Osman

Staten Island, NY

seifosman53@gmail.com

LinkedIn: <https://www.linkedin.com/in/seif-eldin-osman-310248174/>

GitHub: <https://github.com/seifosmaan53>

PROFESSIONAL SUMMARY

Cybersecurity-focused Computer Science Engineer with 4+ years securing and supporting large-scale retail infrastructure across 900+ stores. Skilled in vulnerability discovery (physical & software), incident response fundamentals, AI workflow automation, server hardening, secure configurations, SIEM-style log analysis, firewall policy tuning, and building secure systems from scratch. Experienced in identifying system weaknesses, improving enterprise risk posture, mentoring new team members, and supporting large, distributed environments.

EDUCATION

Bachelor of Science in Computer Science

College of Staten Island, CUNY — graduated June 2026

CERTIFICATIONS & TRAINING

- Google Cybersecurity Certificate (2024 - Present)
- CompTIA Security+ (In Progress)
- TryHackMe / HackTheBox Labs (Active - hands-on security labs)
- Cybrary Cybersecurity Courses (In Progress)
- Google Project Management Certificate (Completed 2025)
- HackerRank Interview Prep Certificate - Python (Completed 2025)

PROFESSIONAL EXPERIENCE

Cybersecurity & IT Store Technology Engineer (Manager-Level Scope) — Rainbow Apparel Companies

New York, NY • September 2021 - Present

- Build, secure, and deploy POS/register systems from scratch, including OS imaging, encryption, hardened configurations, and strict access control.
- Identify vulnerabilities in store systems, networks, POS devices, and physical setups; design and implement mitigation strategies to reduce risk.
- Conduct physical penetration-style checks on store hardware (open ports, exposed cabling, unsecured devices, and access points).

- Configure and maintain secure enterprise networks, including Cisco routers and switches, VLANs, firewalls, wireless infrastructure, and store servers.
- Capture and analyze network traffic and system logs using Wireshark, tcpdump, and ELK dashboards to detect anomalies, misconfigurations, and potential threats.
- Use SIEM-style log analysis to spot suspicious patterns, policy violations, and early indicators of compromise.
- Implement AI-driven diagnostic workflows that reduce troubleshooting time by approximately 40% and decrease overall downtime by 30–40%.
- Strengthen store security with device lockdowns, updated equipment standards, permission models, and secure rollout strategies for both software and hardware.
- Help ensure stores remain online, secure, and functional 24/7 by proactively addressing issues before they escalate into outages.
- Train new employees from scratch on how to build, configure, and troubleshoot store technology, serving as a primary technical mentor on the team.
- Coordinate with leadership to continuously improve cybersecurity posture and operational resilience across 900+ stores and thousands of endpoints.

Impact Highlights:

- Secured and supported technology across 900+ retail locations.
- Identified and remediated vulnerabilities before they caused operational or security incidents.
- Reduced troubleshooting and downtime by 30–40% through automation and improved processes.
- Improved system integrity via restricted access, hardened configurations, and secure equipment deployment.

Inventory & Systems Analyst (Security & Data Integrity) — Pickle Works Wholesale

Staten Island, NY • 2023 – 2024

- Managed and secured warehouse inventory using Oracle NetSuite with strong role-based access controls.
- Created a randomized barcode-scanning workflow to prevent unauthorized edits, data duplication, and fraud.
- Analyzed logs and workflows to discover vulnerabilities, process gaps, and operational bottlenecks.
- Collaborated with Oracle engineers to resolve bugs, validate data, and strengthen system reliability and security.

CYBERSECURITY & ENGINEERING PROJECTS

Secure POS System (Full Stack + Access Controls)

- Architected a production-style POS platform with encrypted inventory, authenticated user roles (admin/cashier), and protected transaction flows.
- Implemented detailed logging, input validation, and safe REST API design to minimize attack surface and reduce vulnerabilities.
- Integrated reporting modules while maintaining least-privilege access and protecting sensitive transaction and customer data.

End-to-End POS System (Inventory, Billing, Reporting)

- Built a full POS solution from scratch handling inventory management, sales processing, and automated report generation.
- Designed the database schema, front-end interface, and back-end logic to ensure accuracy, auditability, and secure operations.
- Added user roles and permissions to separate cashier activities from administrative reporting and configuration tasks.

POS Inventory Management Platform

- Developed an inventory-focused platform to track stock levels, product movement, and store performance over time.
- Implemented safeguards against inconsistent data entry, missing fields, and unauthorized stock adjustments.
- Integrated barcode scanning flows for faster and more accurate product intake and cycle counts.

AI Workflow Automation for Diagnostics

- Built AI-driven workflows to analyze technical issues, store failures, and POS errors using log and metric patterns.
- Automated reporting, ticket generation, and data processing to improve mean time to detect (MTTD) and mean time to resolve (MTTR).
- Designed dashboards and summaries to help IT leadership quickly understand trending issues, risks, and areas needing attention.

FitFusion / NutriTrack — Secure Fitness & Calorie Tracking App

- Developed a mobile fitness app with calorie tracking, BMI calculation, and workout recommendations.
- Implemented secure authentication, encrypted user data storage, and privacy-focused design for health metrics.

- Created validated APIs for fitness and nutrition data, ensuring robust input validation and safe handling of user inputs.

Online Store — 20+ Product E-Commerce Platform

- Built a full-stack e-commerce site featuring 20+ products, including product listings, cart functionality, and checkout flows.
- Implemented secure admin login, access-restricted management panels, and sanitized input handling for all user-submitted data.
- Designed secure database interactions to protect order, customer, and inventory data from unauthorized access or tampering.

InvoiceMe — Invoicing & Receipt Web Application

- Created an invoicing system for generating, sending, and tracking customer invoices and receipts.
- Implemented input validation, secure storage of invoice records, and exportable reports for business owners.
- Designed a simple UI and API endpoints that can integrate with other tools and services.

Server Setup & Security Projects

- Configured Linux servers for application hosting, test environments, and CI/CD pipelines.
- Performed server hardening through firewall configuration, SSH hardening, user/group permissions, and service lockdown.
- Monitored and tuned server performance and security settings to safely handle live or staging workloads.

Hardware & Physical Security Projects

- Assessed in-store IT layouts to identify exposed ports, unsecured devices, and physical tampering risks.
- Worked with store staff to implement better cable management, device placement, and lockable equipment strategies.
- Supported secure deployment of networking and POS hardware to reduce the physical attack surface.

TECHNICAL SKILLS

Cybersecurity

- Vulnerability discovery (physical & software), threat detection, and risk mitigation.
- System hardening, endpoint protection, POS security, and secure configuration baselines.
- Incident response fundamentals, SIEM-style log analysis, and firewall policy tuning.
- Authentication, permissions, and access control models in multi-user systems.

Security Tools

- Nmap, Wireshark, Kali Linux, Splunk / ELK Stack, tcpdump, OpenSSL.

AI & Automation

- AI workflow creation, automated diagnostics, and machine-assisted vulnerability and anomaly detection.

Infrastructure

- Cisco routers & switches, VLAN setup, servers, firewalls, retail store networks, POS hardware.

Programming

- Python, C++, PHP, Java, C, JavaScript.

Frameworks & Tools

- React Native, Node.js, Express, PostgreSQL, Oracle NetSuite, Git.

Systems & Hardware

- Linux, Unix, servers, POS terminals, barcode scanners, printers, retail endpoints.

Soft Skills

- Leadership, communication, mentoring, problem-solving, teamwork, rapid learning.

Languages

- English & Arabic — Fluent.

EXTRACURRICULAR ACTIVITIES

- IEEE Member — Cybersecurity, Robotics, and Engineering workshops.
- Robotics Club Member — Systems programming, control logic, and secure device communication.

REFERENCES

Available upon request