Education

Dalhousie University, Halifax, Nova Scotia

Bachelor of Computer Science, Certificate in Cybersecurity

Summary

Cybersecurity-focused third-year Computer Science student with a strong interest in defensive security, digital forensics, and data analytics. Hands-on experience in Security Operations, including building an Elastic SIEM-based Threat Detection and Log Analysis lab for monitoring and analyzing security events.

Work Experience

Tutor, Dalhousie University

September 2024 - Present

Expected Graduation: August 2026

- Collaborated with 15+ students to simplify complex programming and **information security** concepts, such as **CIA Triad, Risk Assessments, Incidence Response, and Access Control Models**, using strong interpersonal skills and a problem-solving approach showcasing passion for programming and Cybersecurity.
- Demonstrated **attention to detail** by tailoring explanations to individual learning styles and resolving diverse technical queries.
- Fostered a collaborative learning environment that emphasized critical analysis and effective communication.

Software Developer, Barter Trader

January 2024 - April 2024

- Designed and implemented scalable and secure features in an Android application using Java, adhering to Agile development methodologies and the MVVM design pattern.
- Utilized **Confluence** for documenting project requirements, tracking progress, and collaborating with team members to ensure smooth communication and project alignment.
- Worked independently and as part of a team to implement innovative solutions, consistently meeting objectives and showing the ability to adapt quickly to a changing environment.

Projects

Elastic SIEM-Based Threat Detection & Log Analysis Home Lab

- Designed and implemented a fully functional SIEM home lab using Elastic Security, configuring it to collect, analyze, and visualize security logs for threat detection and log analysis.
- Deployed and configured Elastic Agent with Fleet on a Kali Linux virtual machine, forwarding security event logs, system metrics, and network data to Elastic SIEM for real-time monitoring and analysis.
- Developed and fine-tuned custom detection rules, alerts, and interactive dashboards to identify anomalies such as failed logins, privilege escalations, and suspicious network traffic, enhancing threat-hunting capabilities.
- Simulated real-world attack scenarios using tools like nmap, analyzing log data and investigating security incidents to improve defensive Cyber operations skills.

Network Intrusion Detection System (NIDS)

- Developed a **Python-based intrusion detection system** with machine learning, integrating tools like PyShark (Wireshark library for Python) for automated real time network traffic monitoring.
- Conducted **vulnerability assessments** and classified malicious activities (e.g., DoS, port scans), showcasing **attention to detail** in system design.
- Built a virtual environment in **GNS3** to simulate attacks, leveraging Python and Linux scripting to validate system response under various attacks.
- Used SMTP protocol to send mail to network administrator of detected intrusions.

Competitive Events

Capture The Flag (CTF) | LinkedIn Post

- Exhibited a high-energy mindset during intense problem-solving sessions, driving the team to secure 4th place by solving challenges in reverse engineering, cryptography, and web security.
- Demonstrated collaboration, creativity, and adaptability to tackle diverse cybersecurity problems.

Technical Skills

Coding Languages and Databases: HTML, Java, Python, C, SQL, C#, Assembly Language

Networking and Cybersecurity: OSI Model, TCP/IP, Vulnerability Analysis, Threat Detection, Web Application

Security, Bash Scripting, Wireshark

Vulnerability Scanning Tools: Nmap, Metasploit

Relevant Coursework: Information Security, Network Computing, Network Security, Operating Systems

Certificates: CompTIA Security+ (In Progress)