
Certified Penetration Tester, Software Developer, Co-op Computer Science Specialist at University of Toronto

Profile

A continuous learner and team-player with cybersecurity and software development experience, rigorous mathematical ability, and a strong interest in robotics and deep learning. Equipped with extensive experience in Python, C/C++, Linux, networking, and cybersecurity through projects, hackathons, a certification, and CTF competitions. Working on OSCP.

Work Experience**Application Security Lead | AMACSS****October 2025 - Present**

- Application Penetration Testing & Dynamic Application Security Testing (DAST)
- Threat modeling & risk review

Cybersecurity Analyst Co-Op | Equifax Canada**May 2025 - August 2025**

- Analyzed Security Posture, Business Risk, Compliance
- Supported Vulnerability Management sourced from Penetration Tests & automated tools
- Handled issues, exceptions, and deviations
- Provided Security Advisement Services for infrastructure and code development
- Used automated scanning tools, GCP, AWS, shell scripts, Linux

Software Developer | Parkside Pool**May 2023 - August 2023**

- Automated business logistics, client and staff management.
 - Used Flask, Python, SQL, and Firebase to automate client booking and staff hours, scheduling hundreds of mixed requirement lessons per week.
 - Started as a Lifeguard/Instructor and carved out this role to automate administrative processes saving 15+ hours a week
-

Relevant Projects, Certifications, Experience**CompTIA PenTest+ Certified****July 2025**

- Cybersecurity certification in offensive security

SwipeShield - Machine Learning Biometric Authentication**2024**

- Machine learning android app for biometric-based passive user authentication.
- Implementation used bash, machine learning (K means clustering), Python, ADB, TensorFlow, and Git.

Assembly Game Dev**2025**

- Developed a platformer videogame in MIPS Assembly.

Reverse Engineering

- Experience using gdb, IDA, Ghidra to reverse engineer CrackMe's and videogames.
- Memory manipulation with scanmem, Cheat Engine, PINCE
- Debugging with coreutils, sysinternals, OllyDBG, x64dbg

Python/Godot Game Dev**2021-Present**

- Used Python to develop a procedural, open-world, gpu-accelerated, multiplayer network videogame, with fully destructable orbiting planets, spacecraft and vehicles.
- Utilized OOP, client-server architecture, design patterns, and authoritative server code.

Hack the Box & CTFs

- Continuously developing skills and experience through real-world projects, supplemented with Hack The Box.
- Led a team to place gold in a 4 month blue team cybersecurity competition focussed on Linux server hardening
 - Studied TCP/UDP/IP, NAT, network design, OSI Data Model, CVE detection, OWASP top 10
 - Practiced nmap, SQL injections, buffer overflows, Wireshark, arp spoofing, burpsuite, replay, HTTP/FTP/SMTP/SMB/SSH/Telnet
- Developed and exploited highly-quantized LLM's with prompt injections and DAN prompts.

Android Ecotracking App**2024**

- With a team, created an eco-awareness android app using Java, Firebase, Android Studio, Jira, Mockito, and Git
- Practiced SDLC, CI/CD, agile, scrum methods, unit testing with JUnit

DeCloud - Networking and Docker

2023

- Led a team to develop a dynamic-infrastructure peer to peer cloud running on users devices
- Utilized Python, Linux, and Docker containers to deploy applications on remote devices

Linux Development & Server Hosting

- Maintain a personal network of servers. Using docker, virtual private servers and networks.
- Hosting local AI servers ([Ollama](#)/OpenWebUI, Stable Diffusion)
- Built low level networking and resource monitoring tools (Bash, C, C++, make, netcat)
- Developed OS system tools with C, Rust, C++
- Practical experience designing networks, configuring and debugging servers
- Completed U of T and Cisco courses on Unix systems and security

Web Design and Database Experience

2024

- Worked in teams designing dynamic websites with HTML, TailWind CSS, Javascript, TypeScript, NodeJS, React, SQL, Python, Flask, Svelte and Git.
 - Studied SQL and relational algebra database theory.

Built a Drone

2023

- Programmed microcontrollers and microcomputers, firmware, sensors, motors, to build a drone.
 - Developed a C++ flight computer with auto-stabilization code. Programmed microcontrollers using Verilog.
-

Education

Honours Bachelor of Science, University of Toronto

2023-2027

- Specialist in Computer Science (Software Engineering Stream)
- Major in Statistics
- Minor in Astronomy and Astrophysics

Relevant Courses - U of Toronto

- | | |
|--|---|
| • Computer & Network Security | [Cryptography/Encryption/Network Security/OS Security/Web Security] |
| • Computer Networks | [TCP/UDP/IP/Routing Protocols/OSI Model/Mininet] |
| • Software Design | [Unit Testing/Agile/Scrum/Java/Android Studio] |
| • Introduction to Comp. Sci. 1 & 2 | [OOP/Encapsulation/C/DataStructures/Complexity Analysis/Python] |
| • Computer Organization | [Digital logic circuits/Assembly] |
| • Software Tools and Systems Programming | [Unix/Linux/C/Bash/Make] |
| • Introduction to Databases and Web Applications | [HTML/CSS/Javascript/MySQL/Ninja/Relational Algebra] |
| • Design and Analysis of Data Structures | |