

## Shane Currie

shanecurrie94@gmail.com | smcurrie.com | github.com/ShaneC94 | linkedin.com/in/shane-currie

### Work Experience

---

#### **Undergraduate Student Research Fellow, ARiSE Research Lab,**

Ontario Tech University – Oshawa, ON

Nov 2025 – Mar 2026

- Conducting a Systematic Literature Review (SLR) on reducing bias and racism in secure software development.
- Supporting research on Inclusive Human-Centric Goals for Security (HUGS) under the supervision of Dr. Sanaa Alwidian, in collaboration with the CyberSEA Research Lab at Carleton University.

#### **Military Police, Canadian Armed Forces –** Halifax, NS

Mar 2017 – Mar 2022

- Led investigations and resolved criminal incidents and security breaches, applied analytical skills and attention to detail to support military operations, criminal investigations, and legal processes.
- Trained and mentored junior personnel, fostering team effectiveness and contributing to professional development in a high-stakes environment.

### Education

---

**Ontario Tech University** – Bachelor of Software Engineering (Honours)

Expected 2026

**St Clair College** – Ontario College Diploma – Police Foundations

May 2016

**St Clair College** – Ontario College Diploma – Protection, Security, Investigations

May 2015

### Projects

---

#### **AQuA-Reg – Automated Quality Assurance of Software Requirements**

(Capstone 2025-2026)

- Collaborating in a team to design an AI-assisted tool for automated quality assurance of software requirements in regulated industries.
- Developing a machine learning analysis engine, combining rule-based checks with transformer-based models to detect ambiguity, incompleteness, and other requirement quality issues.
- Contributing to requirement parsing, model evaluation, decision fusion, and rewrite suggestion workflows to improve requirement clarity and compliance.

#### **Machine Learning Network Intrusion Detection System**

smcurrie.com

- Built and evaluated ML-based intrusion detection models on the CSE-CIC-IDS2018 dataset, focusing on temporal drift and performance degradation when tested on unseen days of network traffic.
- Developed preprocessing and evaluation workflows to analyze model reliability under changing traffic patterns and distribution shift.

#### **Product Distribution System – Location Service (Distributed Systems Project)**

smcurrie.com

- Developed the microservice with a focus on inter-service communication, REST endpoints, and microservice orchestration.
- Implemented distance calculation, warehouse routing, error handling, and service failover logic while ensuring modular, scalable architecture.
- Configured MySQL integration, Spring Boot service layering, and containerized deployment workflows for reliable multi-service interaction.

### Skills

---

Languages: Java, Python, Kotlin, PHP, SQL, JavaScript, HTML, CSS, XML

Frameworks & Tools: REST APIs, Spring Boot, MVC, Git, CI/CD, spaCy, SpanBERT, BART, Tableau

Specialties: AI, Machine Learning, NLP, Distributed Systems, Quality Assurance, Unit Testing, UI/UX