

AHMED ISMAIL

ahmedismail.ca

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Technical Skills

Languages: Python, Java, C, C++, Rust, C#, JavaScript, TypeScript, Go, Lua, HTML5, CSS, Bash, SQL

Developer Tools: Git, Mercurial, VirtualBox, MATLAB, Eclipse, JIRA, Confluence, Postman, AWS, JFrog

Libraries: Bootstrap, Tailwind, TensorFlow, Keras, PyTorch

Frameworks: Flask, React.js, Express.js, Node.js, TestNG, Maven, Spring Boot, openVINO

Databases/Stores: MySQL, PostgreSQL, MongoDB, Redis, NoSQL

Work Experience

Machine Learning Intern

Jan 2026 - Present

Trend Micro

Ottawa, Canada

- Driving production ML model training, optimization, deployment using **Python, PyTorch, TensorFlow, DeBERTa V3** and **OpenVINO**
- Building AI safety services with **OpenAI API, Hugging Face, RAG**, and **FAISS** vector search for prompt injection detection
- Deploying **cloud infrastructure** on **AWS, Azure**, and **Databricks** using **Python, Go**, and **Docker** containerization

Software Engineer Intern

September 2025 - December 2025

Ross Video Ltd.

Ottawa, Canada

- Co-led** the design and full development of a highly scalable, enterprise-grade **Java/Selenium/Maven** automated video validation framework, refactoring a legacy codebase into **Java 14+** and expanding it with **10+ page models** and reusable **TestNG modules**
- Collaborated with senior engineers and **cross-functional teams** to define framework architecture and coding standards
- Deployed validation framework across all switcher groups, **boosting reliability** and release speed for **10,000+ users**
- Cut manual regression workload by 50%**, streamlining testing processes and boosting overall release reliability

Software Engineer Intern

January 2025 - August 2025

Nokia

Ottawa, Canada

- Engineered a unified **Python** validation interface to replace a **legacy framework** for 800G Ethernet/optical systems, implementing **concurrent threads** and **mutexes** for **OS-level reliability** and **optimizing memory/runtime** for **large-scale automated testing**
- Enhanced **CI/CD pipelines** with automated **REST API** tests, expanding coverage and cutting validation time by **45%**
- Migrated legacy **Perl/TCL** test modules to **Python**, boosting scalability and maintainability across **3 product lines**
- Integrated monitoring and log analysis via **Splunk**, accelerating debugging and providing actionable performance insights

Undergraduate Teaching Assistant

September 2024 - December 2024

Carleton University

Ottawa, Canada

- Led weekly lab sessions, **mentoring 300+ students** by teaching programming concepts
- Offered personalized one-on-one support to students struggling with **Python** programming

Projects

MediClarify - Hackathon Project (HackTheFuture W26)

[GitHub](#) | [Live Demo](#)

React, TypeScript, Tailwind CSS, Node.js, Express.js, OpenAI GPT-4o, Framer Motion, Radix UI, jsPDF

- Built an AI-powered bot that simulates football managers' responses in real-time using Flask & OpenAI GPT

EcoLens - Hackathon Project (uOttahack W26)

[GitHub](#) | [Live Demo](#)

TypeScript, React, Gemini AI, ElevenLabs, MongoDB

- Created a full-stack sustainability app that computes product-level carbon footprints and tracks user behavior via an EcoScore

Embedded Firmware - Interrupt-Driven LED & Sound Controller

[GitHub](#) | [Live Demo](#)

Embedded C/C++, MSP432, ARM Cortex-M4, NVIC, GPIO

- Deployed an interrupt-based system on the MSP432 using **C** to control LEDs and a buzzer

Leadership & Extracurricular

elcanadawy1 | Instagram | Tiktok

April 2022 - Present

Computer Science Content Creator

- Built a community of **50K+ followers** with **4.25M+ monthly impressions** through educational coding content
- Produced tutorials on **data structures, algorithms, and career development** for aspiring developers

Education

Carleton University

Expected Graduation Date: April 2027

Bachelor of Engineering (B.Eng.), Computer Systems Engineering, 4th Year, GPA: 3.7/4.0

Ottawa, Canada

- Relevant coursework: Data Structures & Algorithms, O-O Programming, Embedded Systems, Operating Systems