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#### Skills

**Languages:** Python, C++, C, JavaScript, TypeScript, SQL **Frameworks & Libraries:** React, Node.js, Flask, Docker,

Kubernetes, Apache Spark/Hadoop

AI/ML Tools: TensorFlow, PyTorch, scikit-learn, LangGraph

**Education** 

Data Tools: PostgreSQL, Neo4j, Supabase, ArcGIS,

MongoDB, Splunk

Cloud & DevOps: Git, Azure DevOps, GCP, CloudLab

### Master of Engineering, Computer Engineering, University of Toronto

(Toronto, 2024-2025)

Bachelor of Applied Science and Engineering, Computer Engineering, University of Toronto

(Toronto, 2018-2023)

Minor in Artificial Intelligence and Engineering Business Admission Scholarship, Edward S Rogers Sr. Scholarship

## **Employment**

#### Al Engineer Intern

#### AI/ML Software Development Team, Cisco Systems (May 2024 - Sep 2025)

- Developed a LangGraph-powered multi-agent system with MCP architecture to enrich Cisco syslog data, using a schema-aware Retrieval-Augmented Generation (RAG) framework for scalable incident matching.
- Constructed a structured enterprise-scale knowledge base by extracting 150,000+ log templates across Cisco
  platforms (IOS, IOS-XE, NX-OS, XR), enabling real-time enrichment pipelines and future model integration.
- Extended LightRAG with schema-aware context filtering and dynamic prompt orchestration modules, enabling task-specific query routing and template disambiguation.

#### **Software Engineering Co-op**

## Global Engineering Analytics, MML, Magna International (Jan 2024 - Aug 2024)

- Developed and deployed a full-stack web application using React.js, Ant Design, and Flask REST APIs to streamline tracking of materials and vehicle component tests. Integrated Azure SQL and Blob Storage for secure, scalable data management, reducing job creation and tracking time by 48%.
- Implemented security measures, including JWT token-based authentication and secure API communication.
- Collaborated in Agile sprints, utilizing Azure DevOps to meet project milestones and enhance team efficiency.

### **Software System Integration Intern**

# Infrastructure and Coordination Unit, City of Toronto (Oct 2021 - July 2022)

- Developed algorithms to consolidate and annotate PPP conflict notes, producing updated City of Toronto base maps.
- Automated MapInfo cataloging using the ArcGIS REST API, streamlining updates for MRCWG maps and improving process efficiency by 74%.

#### **Teaching Assistant**

CSC207H1 - Software Design (Java), University of Toronto (Sep 2024 - Dec 2024)

CSC148H1 - Introduction to Computer Science (Python), University of Toronto (Jan 2025 - Apr 2025) ECE243 - Computer Organization (RISC-V Assembly, C), University of Toronto (Jan 2025 - Apr 2025)

## **Projects**

#### AdVize - LLM-Based Evaluation Tool for Advertisements

- Designed an automated system leveraging GPT-4o and fine-tuned LLaMA models to evaluate ad-pushing algorithms with persona-based simulated raters.
- Built functional MVPs in under 2 weeks using Docker, prompt engineering, and simulated persona testing
- Achieved 91.8% alignment between simulated and human feedback, demonstrating robust zero-shot performance in query generation and ad evaluation.

#### TimmySync - Relationship Enhancement Web App

• Developed a full-stack relationship web app using Next.js, Tailwind CSS, PostgreSQL (Prisma), and Supabase to support shared date tracking, photo albums, and real-time location sharing. Integrated JWT authentication, image uploads, and live commenting via Supabase Realtime, with a modular backend built on NextAuth.js and cloud storage.

## SUMO Robot - University of Toronto Robotics Association(UTRA)

• Designed and optimized the robot's mechanical structure using AutoFusion360, 3D printed the prototype, programmed the microcontroller with Arduino, and developed and soldered electrical circuits on PCB.