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EDUCATION

University of Toronto

Sep 2021 – May 2026

Bachelor of Applied Science: **Computer Engineering**. Minors: **AI** and **Business**

Toronto, Canada

Awards: **Stanford Hackathon Winner, Cansbridge fellowship** - Granted to the top 15 young Canadian students, accompanied by a scholarship and the invaluable chance to undertake internships in Asia.

EXPERIENCE

Amazon Robotics - Software Engineer Intern | (12 month term)

Sep 2024 - Sep 2025

- **Led global deployment of robotic planning infrastructure** across **150+ warehouses** in EU and Japan—delivered secure, cross-region SageMaker model orchestration using S3, ECR, Lambda, and IAM. Re-architected backend services for regional scaling, availability. Managed cross-functional communication with **3 internal teams** and **our customers**, resolving escalations and **stabilizing rollout within 48 hours**.
- **Redesigned and deployed the SageMaker endpoint allocator (SmEndpointMappingHandler)** used across every Amazon warehouse; replaced legacy alphabetical assignment with a scalable round-robin allocator to support multi-zone inference. Led core refactoring involving multithreading, async workflows, and algorithmic optimizations.
- **Built real-time operational monitoring platform**—developed a full-stack serverless tool (React, TypeScript, Kotlin, Lambda) for debugging live warehouse events, analyzing pod allocation, and visualizing planning metrics across global fulfillment centers.
- **Delivered secure access control system to monitoring platform under Sev2 escalation**—integrated role-based authorization, federated identity, and custom IAM layers to replace a deprecated monitoring tool in **<2 weeks**; system now supports **250+ active internal users** across multiple orgs.

FlicFit, Japan - AI/ML Engineer Intern

May 2024 - August 2024

- Worked at an early-stage startup in R&D for early dementia detection. Developed a **Lasso Regression model** to predict cognitive impairment (MOCA score) using **normalized gait features** from insole sensor data of **950+ patients**, achieving interpretable results.
- Engineered a **binary classifier** from continuous predictions to label dementia status (DM/NOTDM), using **Scikit-learn** for modeling and **Pandas** for outcome analysis across participant cohorts.
- Led a **C# Unity-based** gaming project that reduced real-time shoe data transfer from **4 seconds** to **0.5 seconds**, improving avatar movement and enhancing player experience. Pitched the product to Niantic for collaboration between insoles and gaming.

NOKIA - SDN and Automation Engineer Intern

May 2023 - Dec 2023

- Created an automation platform through API implementation using **FastAPI, Golang API, Bootstrap, Docker, HTML**, and **Python**, resulting in a remarkable **95%** efficiency gain.
- Reduced infrastructure preparation time from **weeks** to **15 minutes**, enhancing the customer experience and enabling quicker product demonstrations.
- Integrated **ESLint** for rapid issue detection and code quality improvement, reducing review times by **60%**.

Research Position – Under Prof. Xilin Liu at University of Toronto

April 2022 - Sep 2022

- Pursued innovation in neurological disorder research by building a real-time animal behavior tracking tool for **closed-loop neuromodulation** on **Raspberry Pi 4**.
- Developed training datasets using **DeepLabCut** and **Any-maze** to enable responsive stimulation delivery—helping psychotherapists better interpret nervous system responses and increasing clinical efficiency by **15%**.

PROJECTS

Cricket Score Predictor | **Python, pandas, NumPy, Matplotlib, PyTorch, Multi-Threading**

October 2024

- Architected and trained a **PyTorch deep neural network (396→180→90→40→3)** with **ReLU activations** and **softmax** output for multi-class cricket match outcome prediction using player stats and recent form.

Artificial intelligence for Reversi Game | **C, Iteration and Minimax algorithm**

March 2022

- Developed reversi board game for single and two players modes that can predict 15 moves deeper in under **1 second**
- Ranked **1st** place on the course leaderboard by making efficient and successful code among more than **450 students**

Interactive Walking Route Generator | **C++, React, Google Maps API, Google Cloud**

October 2024

- Motivated by repetitive fitness routines, co-built a gamified walking app to make city exploration fun; developed a multithreaded **GIS map system in C++** with Google Maps API and React frontend. Secured **\$1,000 grant** for innovation and market potential.

COMMUNITY INVOLVEMENT

- **Tech Lead Toronto, Rewriting the Code** – Leading local chapter for early-career women in tech; host bi-monthly events and mentorship sessions for community of 2600+ women.
- Organized 300+ attendee WISE STEM nation-wide conference in Canada. Led menstrual health campaign in India, distributing over 600+ sanitary products.