

TECHNICAL SKILLS

- **Languages:** Python, C++, Java, JavaScript, TypeScript
- **Backend:** FastAPI, REST APIs, PostgreSQL, SQL
- **Frontend:** React, Tailwind CSS, HTML/CSS
- **Infrastructure & DevOps:** Docker, Git, Linux, CI/CD, Terraform, AWS (EC2, S3, IAM)
- **Data / ML:** pandas, NumPy, scikit-learn, PyTorch

WORK EXPERIENCE

Software Engineer

September 2023 - April 2024

University of Ottawa, Ottawa/ON

- Designed and implemented Python-based data validation and ingestion pipelines to standardize enterprise architecture datasets, eliminating manual QA steps and improving governance review reliability.
- Developed automation for analysis workflows across 30+ IT initiatives, producing quantified efficiency estimates (20–30%) used in consolidation and modernization decisions.
- Collaborated with senior enterprise architects to deliver structured datasets and documentation supporting system design, compliance, and architecture standardization.

Software Developer

January 2023 - April 2023

March Networks, Kanata/ON

- Led the development of Python tooling to replace Excel-based compliance reporting workflows, reducing manual effort by ~80% for legal and R&D stakeholders.
- Maintained and evolved production data-processing scripts analyzing license and vulnerability data across 3,000+ components, improving consistency and auditability.
- Identified and optimized performance bottlenecks in large-scale data-processing workflows, reducing reporting runtime by ~50% under real production constraints.

PROJECTS

- **Cell Type Classification with scDeepInsight:** Adapted and extended an open-source deep learning pipeline to classify cell types from large-scale single-cell RNA-seq data. Implemented preprocessing workflows, trained an EfficientNet-B3 CNN using PyTorch, and evaluated cross-dataset generalization, achieving 94.7% within-dataset and 92% cross-dataset accuracy.
- **F1 Race Finish Predictor:** Developed a Streamlit-based F1 race finish predictor that predicts race finishing order from starting grid positions using regression models trained on 2025 season data.
- **Portfolio Website:** Developed a modern portfolio website using React, Vite, and Tailwind CSS, optimized for performance across devices.
- **CarQuery:** Built a chat-based used-car search tool using the Yellowcake API to extract live listings and return low-mileage results filtered by make, model, color, and source, displaying results in a sortable table.
- **Dentist Clinic Management System:** Developed a Java and PostgreSQL backend system for clinic scheduling, including patient record management, administrative workflows, and role-based access control.

EDUCATION

Honours BSc Computer Science with CO-OP Option

September 2020 - April 2025

University of Ottawa

Cum Laude

- **Dean's Honour List:** Winter 2025
- **AWS Cloud Solutions Architect** (Coursera/AWS)

LANGUAGES

- **English:** Native or Bilingual Proficiency
- **Turkish:** Native or Bilingual Proficiency
- **French:** Full Professional Proficiency