

Profile

I'm a keen software developer with 9 years of experience bringing data-intensive applications to production. My specialty is data engineering and MLOps. I'm razor sharp in Python and Bash, and proficient in Node.js.

Skills & Knowledge

- I'm an AWS certified Machine Learning Specialist and I have in-depth experience running AI workloads and distributed backend systems on AWS and GCP (App Engine, Cloud Run, Vertex AI).
- I have deep experience designing clean, well-documented, and performant REST and GraphQL APIs.
- Technical communication is my greatest strength, which I developed through courses in graduate school and from working with diverse technical and non-technical stakeholders in all my professional roles.

Employment History

CBC/Radio-Canada, Toronto, ON (Remote)

Senior Machine Learning Developer

October 2022 – Present

Machine Learning Developer

April 2021 – October 2022

- Contributed to REST and GraphQL APIs spanning multiple teams. I led the migration of a major API version, reducing total lines of code by 25% in a large codebase serving over 80 requests/second.
- I designed a Cloud Function architecture for end-to-end model lifecycle and scheduling. This system currently serves 8 audience-facing ML models with a total load of over 3 million requests/day.
- Led a cross-team initiative developing a related videos system that increased relative click-thru by 17% compared to an existing system. This system now serves over 1 million requests/day.
- Converted an existing session-based recommendation model from TensorFlow 1 to 2, enabling my teammates to extend this model in numerous A/B tests.
- Mentored and sponsored teammates through 1-1s, code reviews, facilitating cross-team initiatives, providing feedback on design documents, and setting technical direction.

CaseWare International, Toronto, ON

Server Developer – Machine Learning

May 2016 – March 2021

- Developed a named entity recognition model that doubled the successful extraction rate for lease parties compared to a baseline model. I deployed this model, with unit tests, using AWS SageMaker.
- Independently retrieved, cleaned, and structured a large dataset of XML financial statements. I containerized this ETL pipeline and deployed it to in-house servers.
- Trained and evaluated models for predicting future amendments to financial statements. Achieved a 10% reduction in model error by implementing multiple feature selection algorithms.

Academic Background

Master of Science, Applied Computing

2017

University of Toronto, Toronto, ON

Honours Bachelor of Arts (with high distinction), Computer Science

2015

Wilfrid Laurier University, Waterloo, ON

- Received an Undergraduate Student Research Award to work on a team conducting novel graph theory research. Our results were published in *Discrete Applied Mathematics* (2016).

Honours and Awards

MScAC Program Award – 2021 Alumni of the Year

2021

- Presented to alumni who have made significant contributions to the development of the program.

MITACS Accelerate Fellowship

2016

Addictive Mobility Scholarship in Applied Computing

2015