

WORK EXPERIENCE

Machine Learning Engineer | Kolena Inc San Fransisco, CA | Jan 2023 - Apr 2023

- TBD - Enhance a rigorous machine learning testing platform to surface hidden behaviors and failure modes with faster automated testing workflows

Data Scientist | GoldSpot Discoveries Inc Toronto, ON | Jan 2022 - Apr 2022

- *Python, PyTorch, Sklearn, AWS, EC2, S3, Lambda, OpenCV, MLFlow, Streamlit*
- Created a multi-class object detector with distributed training on 8 GPUs using the YOLOv5 framework to identify handwritten numerical text on wood/rock textures with 85% precision and 79% recall
- Spearheaded the creation of a spectrometer based on valuable elements by training SimCLR models to cluster images of rock and mineral textures using t-SNE
- Deployed a manager for virtual cloud clusters to sort and predict depths for thousands of miles of rock and drill hole images

Data Scientist | eCompliance Toronto, ON | May 2021 - Aug 2021

- *Python, Keras, Spark, Scala, Airflow, Kafka, Looker, SQL*
- Created text classification models using LSTM with 97% accuracy on 50 million records to label accident reports
- Applied feature engineering to improve the MSE of a time series forecasting model (FB Prophet) by 15% to predict upcoming trends and types of workplace accidents
- Designed efficient pipelines for incoming user data to be translated if needed, cleaned, and labelled by NLP models

Software Engineer | eCompliance Toronto, ON | Jan 2021 - Apr 2021

- Automated entire test suites with Cypress and Flutter for web/mobile platforms to significantly improve DevOps processes
- Identified and resolved multiple bugs using Dart, taking part in a substantial reduction from 100 issues to 20 issues

QA Analyst and ETL Developer | Teranet Mississauga, ON | May 2020 - Aug 2020

- Engineered memory efficient ETL packages with advanced SQL validation methods to ensure correctness for half a billion records
- Designed creative solutions in C#, .NET, and T-SQL to standardize complex and ambiguously structured inputs and data

EXTRACURRICULAR ACTIVITIES

Developer Relations Engineer | Aipaca Toronto, ON | Jan 2022 - Aug 2022

- Developer for a [toolbox](#) using TensorFlow to predict training times/costs of machine learning models on AWS EC2 instances
- Organized a summit for 150+ participants from multiple clubs and companies to network and deploy ML projects with Aipaca

Technical Lead + Executive | University of Waterloo Computer Science Club Waterloo, ON | May 2021 - Sep 2022

- Delegated all development for a Discord bot on GCP with a coffee chat, currency, and anti-spam system for 2500+ members

Open Source Contributor | Microsoft Research Asia Beijing, China | May 2021 - Mar 2022

- Refined Python code scripts and translated modules involving fundamental AI knowledge from Chinese into English for [ai-edu](#)

Hackathon Lead Organizer + Mentor | SpartaHacks Guelph, ON | Jan 2019 - Sep 2019

- Planned event and attained major sponsorships, ensuring event success at no-cost for all 120+ participants
- Ran Blockchain, Python, and Docker workshops

EDUCATION

University of Waterloo Waterloo, ON | Sep 2019 - Apr 2024

- Candidate for **Bachelor of Computer Science** with Artificial Intelligence Specialization
- Cumulative GPA: 3.7/4.0 or 84%
- Positions: Undergraduate Academic Plans Committee Member • Computer Science Club Executive
- Scholarships: President's Scholarship of Distinction • Faculty of Mathematics Scholarship

SKILLS

Languages: Python • SQL • C++ • C • TypeScript • Java • Kotlin • Scheme • Bash • R

Frameworks/Tools: Scikit-learn • TensorFlow • Pandas • Numpy • PyTorch • CUDA • MLFlow • OpenCV • MongoDB • AWS • EC2 • Databricks • Anaconda • ETL • Node.js • Git • Docker