
SUMMARY

I am a results-driven Research Scientist with five-years experience in Machine Learning and Software Engineering. I have proven track record working in international environments in North America and Europe. I am committed to continuous learning demonstrated by my participation in Women in STEM and mentorship of undergraduate students.

EXPERIENCE

MICROSOFT, RESEARCH SCIENTIST, COPILOT APPLIED AI 2019 — current
Montreal

GENERATIVE ARTIFICIAL INTELLIGENCE

- Engineered multi-modal, AI-powered (GPT, GPT-v) toolkits to aid software end-users complete complex tasks.
- Conducted prompt-engineering, quantitative experimentation and validation of LLMs.
- Wrote and reviewed code in python, and java.

AUTOMATIC SPEECH RECOGNITION (ASR)

- Built and adapted deep-learning models for ASR. Accuracy gain of 5%.
- Implemented state-of-the-art techniques to reduce error, inference time and computation.

Skills: python, pytorch, Conformer RNNs. Promotion from intern to contractor to Research Scientist.

GERMAN INSTITUTE FOR ARTIFICIAL INTELLIGENCE WITH SIEMENS, RESEARCH ENGINEER 2017 — 2019
Berlin

COMPUTER VISION

- Led implementation of a python framework for traffic-sign recognition, 10% improvement using CNNs.
- Expanded the software's capabilities, incorporating functionalities for weather forecasting and safety regressions.
- Constructed REST APIs for monitoring sensor data in real-time, meeting customer and latency specification.
- Managed two interns including reporting and delegation of tasks and scheduling.

Skills: python, CNNs, benchmarking metrics, decision trees, research.

GENERAL ELECTRIC, SOFTWARE ENGINEER 2015 — 2017
Montreal

SOFTWARE ENGINEERING

- Participated in the Edison Engineering Development Program, a two-year corporate rotational program focused on developing technical excellence. Selected out of 200 applicants to receive engineering experience and training.
 - Partnered with teams across disciplines to implement requirements, design features and increase the dependability of light monitoring systems using python and swift.
 - Applied statistical techniques to conduct topic modelling on an unstructured corpus, increasing business value of asset.
- Skills: java, python, testing, quality assurance, natural language processing.*

RECENT MACHINE LEARNING PROJECTS

ACOUSTICS WEEK CANADA PUBLICATION (2023): Authored ASR adaptation to regional French and dysphonic speech.

SOFTWARE ENGINEERING FOR MACHINE LEARNING (2022): Delivered poster on ML safety with Computer Vision.

EUROPEAN CONFERENCE ON SIGNAL PROCESSING (2021): Authored speech estimation paper using CNNs/RNNs.

SELF-SUPERVISION FEASIBILITY OF CLOUDCAST (2021): Built project on video interpolation for cloud cast prediction.

TECHNICAL SKILLS

TOOLS: Java, Python, SQL (Postgres), JavaScript, Pytorch, Tensorflow, Azure ML.

SPOKEN LANGUAGES: English, French (C2), Spanish (C2), German (B2), Italian (A2).

EDUCATION

QUEBEC INSTITUTE FOR ARTIFICIAL INTELLIGENCE (MILA), UNIVERSITY OF MONTREAL (2024) Montreal
Specialized Master in Machine Learning (DESS) (3.6/4.0), Full Scholarship (\$3000/2 years), course-based (Five courses).

TU BERLIN, TU KAISERSLAUTERN, FU BOZEN (ERASMUS MUNDUS JOINT DEGREE) (2019) Germany, Italy
Master in Computer Science & Software Engineering (4.0/4.0), Full Scholarship (\$48000/2 years), thesis-based.

MCGILL UNIVERSITY (2015) Montreal
Bachelor in Computer Science & Economics. Entrance with full-year of AP credits (Lexington High School, MA).
Eight month COOP in Quality Assurance at Pratt & Whitney Canada (2014). Eight month in Guadalajara, MX (2013).