LUCIA EVE BERGER

438 930 0669 — Montreal — Dual USA & Italian Citizen, Canadian Permanent Resident — lucia.berger@mail.mcgill.ca

SKILLS

Technical	*Advanced:* python, java, javascript, research. *Knowledge*: tensorflow, pytorch, teaching.
Languages	*Fluent*: English, French, Spanish. *Professional*: German. *Intermediate*: Italian

EXPERIENCE

Microsoft *(previously Nuance Communications)* — August 2019 – current
Research Application Scientist — *Montreal, QC*

- Built models for automatic speech recognition, improving performance 5% on customer data through adaptation.
- Optimised systems 30% for overlapped speech and multi-speaker conditions by customer request.
- Tested models under difficult noise conditions, across languages and lower latency to reduce GPU costs.
- Reviewed code and provided development support in python, and java to implement new features.
- Achieved promotional advancement from Research Scientist intern to full-time employee.

German Institute for Artificial Intelligence (DFKI) with Siemens Energy — Jan 2017 - Aug 2019
Software Engineer *(30 hours a week in semester)* — *Berlin, BR*

- Constructed APIs for monitoring sensor data for consumption by diverse applications in real-time.
- Enhanced the querying and aggregation of such data to meet customer specification including dataset preparation (clustered, augmented, analysed) for unsupervised learning tasks.
- Managed two interns (undergraduate students), including reporting and delegation of tasks and scheduling

General Electric — May 2015 - Dec 2016
Software Engineer in the Edison Engineering Program — *Montreal, QC*

- Participated in the Edison Engineering Development Program (EEDP), a corporate rotational program focused on developing technical excellence. Selected out of 200 applicants. Trained in control systems, electrical and hardware engineering. Partnered with teams across disciplines in Quality Assurance and Software Systems.
- Built new features to increase the dependability of light monitoring systems using python and swift.
- Improved codebase and lighting protoype with micro-services, achieving a cost-savings of over 30%.

Pratt and Whitney Canada — September 2015 - March 2016
Full time internship in Quality Assurance Testing with McGill's Engineering Internship Program. — *Montreal, QC*

EDUCATION

MILA (Quebec Institute for AI), U.d. Montréal, *Master in Machine Learning (3.7/4.0)* expected July 2024
Fully funded by RBC Scholarship, accepted to Oxford Summer School in Machine Learning and Health. — 2023

TU Berlin, TU Kaiserslautern, FU Bozen, *Master of Computer Science & Software Engineering (4.0/4.0)* 2019
Studied at three different universities through Erasmus Mundus in Italy and Germany. Fully funded ($48,000).
12-month thesis work with Fraunhofer Institute for Experimental Software Engineering on dependable AI. — 2019

McGill University, Bachelor of Computer Science & Economics — 2015
Entered as an AP scholar with distinction (1 year of credits) from Lexington High School, Massachusetts.
Participated in a 8-month study abroad in Guadalajara, Mexico, mastering Spanish knowledge. — 2014

PROJECTS & CONTRACTS

Software Engineering for Machine Learning Application (SEMLA) Poster: Implemented a framework for traffic-sign recognition, models supported recognition, regression and weather forecasting to meet safety goals. 2022

McGill University & Champlain College: Taught Computer Science at Champlain College. Awarded 95-99% on student reviews, researching at McGill University on classification algorithms for disaster prediction 2020 - 2021

European Conference on Signal Processing: Paper on CNN & RNN for Speech Signal Estimation. 2021