

Lucia Eve Berger

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Citizenship – Canada, USA & Italy

Experience

HINGE HEALTH – SENIOR MACHINE LEARNING SCIENTIST

CANADA, 02.25 –

- Designed and released clustering and sequence models, increasing program retention and billables by 2%.
- Implemented a personalized LLM-exercise recommendation system that adapts dynamically to patient needs.
- Applied large-scale NLP pipelines to analyze millions of provider-patient interactions for better PT adherence.

MICROSOFT – RESEARCH SCIENTIST I, RESEARCH SCIENTIST II

CANADA, 05.21 – 04.24, 05.24 – 01.25

RESEARCH INTERN

09.19 – 09.20

- Led responsible multimodal AI initiatives, reducing user harm by 30%, improving user safety and trust.
- Developed ML/LLM-powered toolkits, empowering thousands of users to generate code seamlessly.
- Enhanced Automatic Speech Recognition (ASR) models by 5% in accuracy using cutting-edge techniques.
- Productionized ASR models, enabling efficient integration and use between teams.
- Managed two interns including reporting and delegation of tasks and scheduling.

CHAMPLAIN COLLEGE – CS LECTURER & RESEARCHER

CANADA, 09.20 – 05.21

- Taught CS courses (java, web-design operating systems) and received excellent reviews from all subjects.

MCGILL UNIVERSITY – COMPUTER MODELS FOR SOCIAL CHANGE

- Employed research findings on text, stream and voice representation to drive climate modelling project.

GERMAN RESEARCH CENTER FOR AI (DFKI) WITH SIEMENS – GRADUATE RESEARCHER

GERMANY, 12.16 – 08.19

- Built a Python framework for traffic signal recognition, 10% improvement using deep learning.
- Enhanced software capabilities with weather forecasting and safety regression functionalities under diverse conditions.

Education

MILA, QUEBEC INSTITUTE FOR AI: UNIVERSITY OF MONTREAL, MCGILL UNIVERSITY – MS in ML. CANADA, 2024

ERASMUS MUNDUS MASTER: TU BERLIN & KAISERSLAUTERN, FU BOZEN – MS in CS/SE. GERMANY, ITALY, 2019

MCGILL UNIVERSITY – BA in CS & Econ. AP credits (Lexington, HS), bursary, 8-month study in Mexico. CANADA, 2015

Skills

PROGRAMMING: python, java, sql, pytorch, tensorflow, scikit-learn, hugging face, gpt, databricks.

LANGUAGES: Fluent – English, Spanish, French. Conversational – Italian, German.

Publications & Awards

ARXIV – Diagnosing COVID-19 Severity from Chest X-Ray Images Using ViT and CNN Architectures. 2025

NEURIPS WIML CONFERENCE – Improving Harm Reduction Tactics For Multi-Modal Software Solutions. 2024

ACOUSTICS WEEK – Enhancing Automatic Speech Recognition of a Regional Dialect: A Pilot Study with Québécois. 2023

RBC FUTURE LAUNCH SCHOLARSHIP – Full Scholarship (6k) for studies at MILA. Twice awarded. 2023

SOFTWARE FOR ML CONFERENCE – Refining a Data-Driven Model Uncertainty with Traffic Sign Recognition. 2022

EUROPEAN CONFERENCE ON SIGNAL PROCESSING – Non-Intrusive Estimation of Speech Signal Parameters. 2021

ERASMUS MUNDUS SCHOLARSHIP – Full Scholarship (48k, over two years) for masters studies, ranked 1st of 2000. 2019