LUCIA EVE BERGER

Montreal — 438.930.0669 — Citizenship: USA & Italy, Canadian PR

 ${\tt LUCIA.BERGER@MAIL.MCGILL.CA-LUCIAEVEBERGER.GITHUB.IO-LINKEDIN.COM/IN/LUCIABERGER}$

EXPERIENCE

MICROSOFT (NUANCE) — RESEARCH APPLICATION SCIENTIST, MONTREAL

· Programmed software for reliable end-to-end Automatic Speech Recognition.

04/21 - present 09/19 - 07/20

- · Optimised pipelines to capture system metrics for shareholder's use.
- · Tuned systems for better performance in cases of overlapped speech (30% improvement).
- · Developed a custom acoustic estimator and voice-activity classifier using neural-networks.
- · Tested recognition under difficult noise conditions, across languages and at lower latency.
- · Reviewed code and provided development support in python, lua, and java.

MCGILL UNIVERSITY — SOFTWARE DEVELOPER, MONTREAL

06/20 - 04/21

- · Implemented a reliable pipeline for classifying streaming twitter data.
- · Delivered a flexible API and dashboard that geo-located, and visualized tweets in near real-time.

GERMAN INSTITUTE FOR AI (DFKI) & SIEMENS — RESEARCHER, BERLIN

01/17 - 09/18

- · Constructed a REST API in java for monitoring sensor data for real-time consumption.
- · Enhanced the querying and aggregation of such data to meet customer specifications.
- · Clustered unsupervised datasets and augmented data with real-life conditions.

GENERAL ELECTRIC — SOFTWARE ENGINEER, MONTREAL

05/15 - 11/16

- · Participant in the EEDP (Edison Engineering Development Program), a corporate rotational program focused on developing technical excellence. Selected as 1/200 candidates.
- · Built new features to increase the dependability of light monitoring systems with python and swift for mobile applications.

EDUCATION

MILA & UNIVERSITY OF MONTREAL

Montreal

Specialized Graduate Degree in Machine Learning (D.E.S.S)

09/20 - 01/23 (expected)

- · MILA is Quebec's Institute for Artificial Intelligence education, research and collaboration.
- · GPA: 4.0, fully funded by RBC Future Launch Scholarship (2 year recipient, \$3000).
- · Machine Learning and the Environment, Feature Representations, Project-based learning.

TU BERLIN, TU KAISERSLAUTERN & FU BOZEN

Berlin & Bozen

Joint Master degree in Software Engineering & Computer Science (Erasmus Mundus)

08/19

- · Admission rank: 1st of 1200 applicants (18 of 1200 accepted).
- · GPA: 109/110 (99%. 4.0), fully funded by a EU scholarship ($\leq 48,000 / 2 \text{ years}$).
- · Machine & Deep Learning, Robotics, Data Mining & Visualization, Statistical Methods

MCGILL UNIVERSITY Bachelor degree in Computer Science & Economics

Montreal 05/15

· 8-month technical exchange in Universidad Auto de Guadalajara, Mexico.

8/13

05/21

05/21

02/21

03/19

05/15

01/15

08/19

Champlain College: Instructed Java I, II & Operating Systems at the CEGEP level. (200 hours) Projects Rosedale Academy: Designed computer science curriculum for an Ontario school-board. (110 hours)

Adventures in AI: Implemented an interactive Python and AI course for 8 to 12s. (50 hours) **NVIDIA GPU optimization:** Certificate on use of GPUs for deep learning. (40 hours) **APEX Business Competition** 3rd place, 1000 CAD for energy gamification application.

Pratt & Whitney: 8 month engineering COOP, focused on quality assurance and usability testing.

Nuance Internal Conference: Moving Toward One Central Research ASR Testing Framework Posters & EUSIPCO 2020: Non-Intrusive Estimation of Speech Signal Parameters

03/2201/21

Thesis: Refining a Data-Driven Model Uncertainty Framework with a Traffic Sign Recognition

SKILLS

Papers

Coding — python, java familiar: C/C++, ruby, lua.

Web — HTML, CSS, javascript (angular.js, react.js, node.js, express.js), django, flask.

ML/DL — pandas, numpy, sklearn, familiar: keras, scikit, tensorflow, pytorch.

Data Processing — SQL, noSQL, postgres, data mining, visualization familiar: AWS.

Languages — English (native), French (C1), Spanish (C1), German (B2), Italian (A2).