LUCIA EVE BERGER

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EXPERIENCE

McGill University

Montreal

Summer Researcher (School of Geography and Environment Canada)

06/20 - 09/20

· Responsible for creating a reliable pipeline using streaming twitter data. Deliverables include an API and dashboard that digest, classify and geo-locate tweets in near real-time.

Nuance Communication

Montreal

Research Scientist Intern (full-time)

09/19 - 05/20

- · Implemented and tested algorithms for detecting voiced segments for NLP.
- · Developed a custom acoustic estimator using a CNN and LSTM Model. A key accomplishment was optimising the training and testing pipeline for lower runtime.
- · Achieved improved performance over internal baselines under difficult noise conditions and across languages. Classifer acheived 10% higher accuracy with a smaller context window.

Fraunhofer Institute for Experimental Software Engineering

Berlin

Researcher in Data Engineering (full-time)

08/18 - 09/19

- · Developed a framework for quantifying uncertainty in Traffic Sign Recognition.
- · Analysed diverse datasets with principle component analysis and applied relevant augmentations capturing real-life conditions.
- · Conducted classification and regression tasks on these structured and unstructured data with decision trees and CNNs.

German Institute for Artificial Intelligence (DFKI) & Siemens Energy

Graduate Research Assistant (full-time (2 semesters), part-time)

01/17 - 09/18

Berlin

- · Implemented and tested an application with multiple integration points in Java.
- · Constructed and tested a REST API for monitoring, grouping and warehousing sensor data for real-time use by subsystems.
- · Improved the querying, aggregation and stand alone micro-services with the goal of improved visualizations to meet customer specifications.

General Electric Canada

Montreal

Software Engineer (full-time)

05/15 - 11/16

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

RESEARCH, PROJECTS & AWARDS

RBC Future Launch Scholarship:toward D.E.S.S. in Machine Learning at MILA.

Adventures in AI Curriculum Development: 50 hour python course for 8 to 12s.

NVIDIA GPU optimization: 40 hours certificate on use of GPUs for deep learning.

Tweet Classification: sentiment mining, unstructured data, numpy, weka.

APEX Startup 3rd place, 1000 CAD: node.js, gamification, MEAN stack.

O5/15

Pratt & Whitney: 8 month engineering internship, QA, usability testing.

EDUCATION

TU Berlin, TU Kaiserslautern & FU Bozen

Berlin & Bozen

Joint Master in Software Engineering & Computer Science

08/19

- · GPA: 3.8/4 (95%), EU scholarship: $\leq 48,000/2$ years, admission rank: 1/1200.
- · Machine & Deep Learning, Robotics, Data Mining & Visualization, Statistical Methods

McGill University

Montreal

Bachelor in Computer Science & Economics, 8 month exchange in Mexico.

5/15

SKILLS

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

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

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

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

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