LUCIA EVE BERGER

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EXPERIENCE

Nuance Communication

Montreal

Research Scientist (internship)

09/19 - 04/20

- · Implemented, trained and tested different algorithms (CNN, RNN, HMM) for Voice Activity Detection (VAD) and a custom acoustic parameter estimator. Key accomplishment of optimising the training and testing pipeline for improved performance.
- · Programmed software to automate data collection and corruptions for more robust conditions.

Fraunhofer Institute for Experimental Software Engineering

Berlin

Researcher in Data Engineering

08/18 - 09/19

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

German Institute for Artificial Intelligence (DFKI)

Berlin

Graduate Research Assistant (part-time)

01/17 - 09/18

- · Implemented and tested an application with multiple integration points in java.
- · Redesigned a SQL database, complete with custom and reusable libraries.
- · Responsible for two interns, including reporting and delegation of tasks.

Siemens Berlin

Graduate Software Engineering CO-OP (full-time)

01/17 - 10/17

- · 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 Engineering Leadership Program

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.
- · Developed new features to increase the dependability of light monitoring systems with python and swift for mobile applications.
- · Built and tested APIs that merged large samples of unstructured data.

Projects

Adventures in AI Curriculum Development: 50 hour python course for 8 to 12s. 01/20

NVIDIA GPU optimization: 40 hours, GPUs, deep & reinforcement learning. 03/19

Tweet Classification: sentiment mining, unstructured data, numpy, weka. 06/18

APEX Startup 3rd place: node.js, gamification, MEAN stack. 05/15

Pratt & Whitney: 8 month engineering internship, QA, usability testing. 01/15

Autonomous University of Guadalajara: 8-month technical exchange in Mexico. 06/13

EDUCATION

TU Berlin, TU Kaiserslautern & FU Bozen

Berlin & Bozen

Joint Master in Software Engineering & Computer Science

08/19

- · GPA: 3.7/4 (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

5/15

SKILLS

Coding: python, java, javascript (angular, react), familiar: C/C++, ruby.

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

Databases: SQL, noSQL, postgres, data mining, visualization familiar: AWS. **Software Principles** OOP design, microservices, algorithms, testing: unit testing.

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