

LUCIA EVE BERGER

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EXPERIENCE	Nuance Communication	Montreal
	Research Scientist (<i>contract</i>)	09/19 – 05/20
	<ul style="list-style-type: none">· 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. Classifier achieved 10% higher accuracy with a smaller context window.	
	Fraunhofer Institute for Experimental Software Engineering	Berlin
	Researcher in Data Engineering (<i>full-time</i>)	08/18 – 09/19
	<ul style="list-style-type: none">· 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)	Berlin
	Graduate Research Assistant (<i>part-time</i>)	01/17 – 09/18
	<ul style="list-style-type: none">· 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 (<i>full-time</i>)	01/17 – 10/17
	<ul style="list-style-type: none">· 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 (<i>full-time</i>)	05/15 – 11/16
	<ul style="list-style-type: none">· 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 certificate on use of GPUs for deep 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
EDUCATION	TU Berlin, TU Kaiserslautern & FU Bozen	Berlin & Bozen
	Joint Master in Software Engineering & Computer Science	08/19
	<ul style="list-style-type: none">· GPA: 3.8/4 (95%), EU scholarship: €48,000/2 years, admission rank: 1/1200.· <i>Machine & Deep Learning, Robotics, Data Mining & Visualization, Statistical Methods</i>	
	McGill University	Montreal
	Bachelor in Computer Science & Economics, 8 month exchange in Mexico.	5/15
SKILLS	Coding: python, java, javascript (angular, react), <i>familiar:</i> C/C++, ruby. ML/DL: pandas, numpy, sklearn, <i>familiar:</i> keras, scikit, tensorflow. Data Processing: SQL, noSQL, postgres, data mining, visualization <i>familiar:</i> AWS. Software Principles OOP design, microservices, algorithms, testing: unit testing. Languages: English, French (C1), Spanish (C1), German (B2), Italian (A2).	