

LUCIA EVE BERGER

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EXPERIENCE	McGill University	Montreal
	Summer Researcher (<i>School of Geography and Environment Canada</i>)	06/20 – 09/20
	<ul style="list-style-type: none">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 (<i>full-time</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) & Siemens Energy	Berlin
	Graduate Research Assistant (<i>full-time (2 semesters), part-time</i>)	01/17 – 09/18
	<ul style="list-style-type: none">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 (<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.	
RESEARCH, PROJECTS & AWARDS	Rosedale Academy: <i>Grade 12 Computer Science curriculum development (110 hours)</i>	05/20
	RBC Future Launch Scholarship: <i>toward D.E.S.S. in Machine Learning at MILA.</i>	09/20
	Adventures in AI Curriculum Development: <i>50 hour python course for 8 to 12s.</i>	01/20
	NVIDIA GPU optimization: <i>40 hours certificate on use of GPUs for deep learning.</i>	03/19
	Tweet Classification: <i>sentiment mining, unstructured data, numpy, weka.</i>	06/18
	APEX Startup 3rd place, 1000 CAD: <i>node.js, gamification, MEAN stack.</i>	05/15
	Pratt & Whitney: <i>8 month engineering internship, QA, usability testing.</i>	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 <i>familiar:</i> C/C++, ruby. Web: HTML, CSS, javascript (angular.js, react.js, node.js, express.js), django, flask. ML/DL: pandas, numpy, sklearn, <i>familiar:</i> keras, scikit, tensorflow. Data Processing: SQL, noSQL, postgres, data mining, visualization <i>familiar:</i> AWS. Languages: English, French (C1), Spanish (C1), German (B2), Italian (A2).	