

## EDUCATION

- **University of Waterloo** Waterloo, ON  
*Master of Mathematics in Computer Science (Thesis); GPA: 91.7%* Sept 2019 – April 2021 (expected)
  - **Supervisor:** [REDACTED]
  - **Research Interests:** Information Retrieval, Natural Language Processing, Machine Learning
  - **Teaching Assistantships:** Head TA for CS234 Data Types and Structures, TA for CS348 Database Management
- **University of Waterloo** Waterloo, ON  
*Bachelor of Mathematics in Computer Science and Statistics; GPA: 88.7%* Sept 2014 – Aug 2019
  - **Relevant Courses:** Information Retrieval, Neural Networks, Randomized Algorithms, Data Visualization, Optimization in Data Science, Computational Inference, Financial Modeling, Applied Probability

## EXPERIENCE

- **Bloomberg** New York, NY  
*Software Engineer* Sept 2018 - Dec 2018
  - Redesigned the Recommendation System for financial assets in Bloomberg Terminal using nearest neighbour and hierarchical clustering algorithms.
  - Implemented new Recommendation function using Python, which improved the flexibility from rule-based to personality-based, and increased data update frequency from once a day to every second.
- **Square Inc.** San Francisco, CA  
*iOS Developer* Jan 2018 - April 2018
  - Created iOS UI components and network calls for Square Card features in Square Point of Sale (POS) app.
  - Built a separately compiled module (Pod) with CocoaPods and integrated it into Square POS app.
- **Intel** Toronto, ON  
*Software Engineer, Deep Learning Acceleration (DLA) team* May 2017 - Aug 2017
  - Developed tools to generate range analysis for Convolutional Neural Network using C++ and Python.
  - Implemented an Unrolled Accumulator supporting customized floating point numbers using C++.
- **Scotiabank** Toronto, ON  
*Financial Engineering Analyst* Sept 2016 - Dec 2016
  - Built and maintained quantitative tools written in C++ for trading and structuring desks.
  - Developed tools to conduct sensitivity analysis for different models using Perl and Bash scripts.

## PROJECTS

- **High-recall relation extraction for user-defined relations [Python]**  
*Graduate Research Student, University of Waterloo* April 2020 - Present
  - Using continuous active learning to extract user-defined relations from unstructured texts and achieve high recall. This work also provides users flexibility of defining their own relations regardless of whether they are in existing knowledge base or not.
- **Keyword detector trained by synthesized examples [Python]**  
*Undergraduate Research Assistant, University of Waterloo* May 2018 - Aug 2018
  - Building a customized Keyword Detector with synthesized speech examples, which are collected from popular web services such as Microsoft Azure Cognitive Services, Google Cloud Text-to-Speech API, IBM Watson, etc.

## PUBLICATION

[REDACTED] July 2020

## PROGRAMMING SKILLS

- **Languages:** Python (spaCy, scikit-learn, pandas), C++, R, MATLAB, Bash, SQL, Scheme
- **Technologies:** Lucene, Solr, Jupyter, Spark, Hadoop, Git, Neo4j, Docker, L<sup>A</sup>T<sub>E</sub>X, Bloomberg Terminal