

Experience

Software Engineer Intern 🏢 Twitter 📍 San Francisco, California

May 2020 - Aug 2020

- Part of the Health Organization, building tools to ethically censor inappropriate and dangerous content on Twitter
- Using Scala to build data pipelines and content aggregation platforms

Software Engineer Intern 🏢 Tesla 📍 Palo Alto, California

Jan 2020 - Apr 2020

- Working with functional programming in Scala to enable distributed streaming applications in Kafka and Akka
- Significantly shortening load times for the Tesla Mobile App by building a clustered micro-service in Kubernetes that handles massive request loads gracefully using circuit breakers and back pressure
- Contributing to the hierarchical asset aggregation system for the Tesla Virtual Power Plant, enabling Autobidder

Software Engineer Intern 🏢 Wealthsimple 📍 Toronto, Canada

Sept 2019 - Dec 2019

- Developed backend to increase speed and reliability of deposits and withdrawals using Ruby on Rails
- Implemented filtering algorithm in Java to sort and visualize transactions between financial institutions
- Architected production-grade email notification service, enabling back-end state machine to notify customers

Data Scientist Intern 🏢 Office of the Director of National Intelligence 📍 Washington, DC

Aug 2019 - Apr 2020

- Researching data compression techniques (Huffman encoding, Chaos Theory) for high-volume DNA data
- Building a software platform to pre-process DNA files, and select optimal compression protocols

Software Development Engineer Intern 🏢 Publicis Sapient 📍 Toronto, Canada

Jun 2019 - Aug 2019

- Developed a machine learning powered chatbot by employing K-Means Clustering on click-stream data
- Analyzed the performance of \$500 million+ eCommerce site to identify bottlenecks, resulting in faster load times

Software Engineer Intern 🏢 Pickup Rideshare 📍 Hamilton, Canada

Apr 2018 - Aug 2018

- Architected a matching algorithm (Gale-Shapley) to match riders with available drivers
- Engineered a progressive web app using React, redesigned the home page to increase customer retention by 20%

Multi-Organ Transplant Researcher 🏢 Toronto General Hospital 📍 Toronto, Canada

May 2017 - Aug 2017

- Developed a machine learning algorithm in Python to detect severe liver disease, enabling early life-saving treatment
- Trained and validated machine learning models by normalizing and cleaning patient data
- First author on Meta-Analysis published in the Canadian Liver Journal - bit.ly/nashgen

Education

B.Eng, Electrical & Biomedical Engineering (Co-op) 📍 McMaster University

Expected Apr 2021

- Deans Honor List (2016-2018), Honors Entrance Scholarship (\$2000), 3.4/4.0 GPA
- Relevant courses: Data Structures and Algorithms, Discrete Math, Statistics, Vector Calculus, Molecular Biology

Skills

Languages: Python, Java, Ruby, Scala, SQL, C, C++, JavaScript, Swift, MATLAB, Assembly

Tools and Frameworks: Kubernetes, Pandas, AWS, Bootstrap, TensorFlow, Rails, Firebase, Node.JS, Git/Version Control

Projects

Strive 🏢 MedHacks, Johns Hopkins University bit.ly/striveJHU

Sept 2018

- Utilized computer vision (Google Vision API) to extract nutritional info from user uploaded pictures of food, allowing users to track their calories in a virtual food diary. Placed 2nd of 200+ teams