

#### Education

## University of Waterloo - Bachelor of Computer Science Candidate 2019

Waterloo, ON — Sept 2014-Present

- 90% CAV 3.86 GPA Dean's Honours List
- · Highlight Courses: Real-time Programming Graph Theory Combinatorial Optimization

## Experience

## Jane Street Capital - Software Development Intern

New York, NY — September 2018-Present

• Optimized the performance of a graph computation library used in trading systems

# Snap Inc. - Software Engineering Intern - Memories

Venice, CA — Jan-April 2018

• Designed a system that used computer vision and machine learning to score image quality

## Dropbox - Software Engineering Intern - Infrastructure

San Francisco, CA — May-August 2017

- Improved reliability and tooling of a distributed real time event processing system
- Upgraded the service's internal throttling using a distributed rate limiting system

# Yelp - Software Engineering Intern - Distributed Systems

San Francisco, CA — August-December 2016

- Designed an algorithm to identify and distribute high-load topics across Kafka clusters
- Added features and made improvements to Python tools for managing Kafka clusters

# NVIDIA - Software Engineering Intern - CUDA Libraries

Santa Clara, CA — January-April 2016

- Implemented an efficient deconvolution kernel for the cuDNN deep learning library
- Added cuDNN RNN bindings to the Torch deep learning framework
- Improved CUDA kernel code for the cuFFT CUDA library

# Primate Labs - Software Developer

Toronto, ON — May-August 2015

- Used C++ and x86 assembly to develop and optimize CPU benchmarking workloads
- Programmed for GPUs using CUDA, OpenCL, and OpenGL

#### Projects

## Spectacle

A path tracing rendering engine implemented in C++ - Available on Gitub

## **Programming Skills**

C++ - C - Python - OCaml - Java - Go - Apache Kafka - CUDA - OpenCL - OpenGL