

## Professional Experience

### Capital One Canada

Software Engineering Intern

May 2019 - August 2019

- Engineered UI library used by Customer Acquisition teams in **production**, reducing their codebases by over **90%**
- Guided **tech stack migrations** for the Canadian web teams by instituting process standards, running workshops and contributing core components to ensure UX consistency for sites serving over **10,000 customers weekly**
- Doubled** deployment frequency by standing up a CI/CD pipeline to **automate** build, test, and publish procedures
- Developed CLI utility for **bootstrapping** applications with internal libraries, **expediting** the development cycle

*React, JavaScript, Node, Jest, Enzyme, Jenkins*

### Sunnybrook Research Institute

Software Development Intern

July 2018 - August 2018

- Reworked treatment-monitoring program to run **80% faster** and process larger datasets in real-time
- Revamped data pipeline by **reducing memory-transfer requirements** among compute devices by **50%**
- Ported OpenGL render from CUDA Runtime to Driver API for lower levels of abstraction and full kernel control

Software Development Intern

July 2017 - August 2017

- Implemented program to automatically transform large 3D medical images for a set of algorithms to replace manual entry, improving ease of use and **reducing operation time twofold**
- Assisted configuration of virtualized Linux servers on which to run treatment-planning computations

*C++, CUDA, OpenGL, Python, NumPy, Tkinter*

## Other Experience

### FIRST Robotics Canada

Team 4914 - Team Captain, Head Programmer

December 2015 - June 2018

- Introduced use of vision for goal tracking by implementing an OpenCV pipeline to lower aim-time by **60%**
- Improved drivetrain consistency by using PID controllers, achieving accuracy to a **2" tolerance**

*Java, Python, OpenCV, SolidWorks, Autodesk Inventor, WPILib*

### Markdown to HTML converter

Utility converting GitHub-flavored Markdown to HTML documents

[GitHub repo >](#)

C++

### Personal Site

Online presence, hosting personal notes, resume, and web apps

[Site >](#)

*React, MySQL, MongoDB, Django, Nginx*

- Experience with **Bash** and **Linux** from daily driving Ubuntu, Debian, Arch, and Manjaro over the past six years
- Exposure to **Scala**, **Scheme**, and **MIPS** architecture through coursework

## Education

### University of Waterloo

Honours Computer Science (Co-op), 2023

- Cumulative GPA: 3.93 / 4.00
- Pursuing specialization in Data Science

## Achievements

- Google Code Jam 2019 Round 2 qualifier
- Canadian Computing Competition 2018 Top 4%
- USA Computing Olympiad Gold Division since 2017