

+1 647 609 2677

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
- ► Mentored and on-boarded two software engineering interns to foster an inner-source environment

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

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

Projects

Markdown to HTML converter

Markdown utility converting GitHub-flavored Markdown to HTML documents

GitHub repo > C++

Pool simulator

8-ball simulator, under development, coupling a physics engine and graphics library

GitHub repo > Python, pyglet, pymunk

Achievements

Google Code Jam 2019

Round 2 qualifier

Canadian Computing Competition 2018 *Top 4%*

USA Computing Olympiad Gold Division since 2017

Education

University of Waterloo

Honours Computer Science (Co-op)

- ► Cumulative GPA: 3.93 / 4.00
- ► Candidate for Bachelor of Computer Science
- ► Pursuing specialization in Data Science
- ► Anticipated graduation: April 2023