









Bachelor of Mathematics (Computer Science) — University of Waterloo, Class of 2020

# **Experience**

#### **Cruise** — Autonomous Vehicle Engineering

Sept 2019 — Dec 2019

· Working with the perception team to improve autonomous driving

### **Huawei Technologies** — *Software Developer*

Jan 2019 — Apr 2019

- Worked on a distributed training framework for machine learning
- Increased model accuracy by designing and implementing a method to ensure the data shared between nodes during training is accurate and consistent
- Wrote scripts to report code performance statistics and identified potential code optimizations through extensive testing and profiling
- · Researched techniques to improve model accuracy on distributed and single node systems

#### **Aecon Research Team** — *Software Developer*

May 2018 — Aug 2018

- Led the development of tools and features to allow the integration of digital verification of construction components in fabrication plants
- Implemented and documented a new verification process technique for the alignment of construction pipes which will be included in a civil engineering journal article
- Increased application responsiveness by offloading CPU heavy operations to separate threads

### **Rocscience** — Software Developer

Sept 2017 — Dec 2017

- Designed comprehensive data display tools using Microsoft's Foundation Class Library
- Implemented 2D and 3D models of structure foundations and materials using the OpenGL API
- Built a tool to generate customizable reports on geological models using Microsoft's Graphics Display Interface and HTML

## **Tangam Systems** — *Software Developer*

Jan 2017 — Apr 2017

- Collected client browser information and metrics to evaluate the continued support for legacy browsers using C# and VBA
- Advanced current roadmap initiatives such as mobile notifications and team performance statistics by developing and maintaining ASP.NET MVC web applications

# Projects \_\_\_\_\_

## **Compiler** — Course Project

Mar 2018

• Wrote a compiler in C++ to compile a subset of C into MIPS assembly code

## **Recipe-Builder** — *Hack The Valley*

Jan 2017

- Created an Alexa app to recommend recipes based on ingredients provided by the user, utilizing Amazon's Alexa Skills Kit
- Added the application's voice commands and response phrases to Alexa in JavaScript

## Skills

**Languages**: C++, C, C#, Java, Bash, Python, HTML/CSS, Racket **Technologies**: Git, SVN, Visual Studio, MFC, OpenGL, VTK, JIRA,