









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 \_\_\_\_\_

### **Bad Mahjong** — Online Game

June 2020

- Bad Mahjong is an online multiplayer mahjong game for up to four players
- The game uses a Flask backend, a React frontend, and <u>socket.io</u> to create lobbies, invite friends, and connect players in a match of mahjong

## **Compiler** — Course Project

*Mar 2018* 

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

# Skills

Languages: C++, Python, Javascript, C, C#, Java, Bash, HTML/CSS, Racket

Technologies: Git, React, Flask, Socket.io, MFC, OpenGL, JIRA,