# William Lo

Software Engineering – University of Waterloo

Ø lowilliam.com⊚ github.com/Will-Lowilliam.lo@uwaterloo.ca

#### Skills

- Languages: Python, C, C++, LabVIEW, JavaScript, HTML/CSS, ¡Query, Arduino, Node.js
- Frameworks: Meteor, Kivy, Bootstrap, Foundation
- Tools: Vim. Bash. Adobe Photoshop. Adobe InDesign

# Experience

# Software Engineer Intern | Quanser

June 2014-August 2014

- Developed and tested software for a variety of microcontrollers and robotic systems
- Developed software with LabVIEW that manipulated an inverse pendulum controlled by a motor, PID controller, and Microsoft Kinect.
- Performed quality assurance using techniques such as regression testing

#### FIRST Robotics Competition Team Captain

Sept 2011-June 2015

- Led a team in the software and design of a 120-pound robot to perform sports related tasks
- Strengthened the software team by integrating modular based programming, which allowed more programmers to contribute to the project
- Optimized the performance of the robot with PID controllers and autonomous state machines

# **Projects**

WatProduct Ongoing

- Implemented a web application that can rate a product
- Utilizes IBM's Watson APIs to analyze news articles and review websites of a particular product
- Created with NodeJS and IBM Bluemix

#### Tetromino Simulator

December 2015

• Co-designed and implemented a Tetris game that utilized the Launchpad Development System as a game controller

Twitter Map November 2015

- Designed a web application that displays the geological location of searched tweets
- Created using JavaScript, Google Maps API, Twitter API, and Meteor

### Music by Mood

August 2015

- Implemented a Python application that sorts the user's music by their moods
- Utilized the Echo Nest API to retrieve musical information of each song

# Food Finder

June 2015

• Implemented a Python mobile app that finds recipes using the Edamam API

## Relevant Courses

CS 137: C basics, Arrays, Recursions, String Manipulation, Structures, Dynamic Memory, Algorithms

CS 138: C++ basics, Abstract Data Types, OOP, Software Engineering and Design