# William Lo

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*Software Engineering – University of Waterloo*

## Skills

- **Languages:** Python, C, C++, LabVIEW, JavaScript, HTML/CSS, jQuery, 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