

# Kieran Broekhoven

3B Mechatronics Engineering  
University of Waterloo

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## Software Skills

Languages: C, C++, Python,  
HTML, Bash, Batch,  
MatLab, C#

OS: Windows, Ubuntu, OS X

Frameworks/Libraries: ROS,  
Django, Bootstrap, OpenGL

Other: Git, SVN, REST API, Sentry,  
JSON, Visual Studio

## Other Technical Skills

AutoCAD, SolidWorks, MIMICS,  
3-Matic

Machine shop experience using  
lathes and drill presses

## Activities and Interests

Martial Arts: Karate,  
Kung Fu, Kobudo

Theatre: Director,  
performer, choreographer

Music: guitar, piano, drums,  
bass, singing

Recreation: volleyball, rock  
climbing, snowboarding

## Relevant Experience

### Software Developer - IGNIS Innovation

September – December 2016

- Developing OpenGL and .NET software for an application interfacing with organic LED screens
- Debugging issues in OpenGL and .NET
- Refactoring code and restructuring architecture to create a more readable and efficient code base
- Organizing the company foosball tournament

### Test Engineering Analyst (Software) – Clearpath

January – April 2016

- Writing extensions to Sentry, a crash reporting software, to automate company processes.
- Designing a Django application to monitor a set of servers that each control a fleet of robots.
- Writing various scripts to streamline or replace time consuming tasks.

### Build Master Intern – Radialpoint, Inc.

May – August 2015

- Designing a system using Python that automates the process of setting up virtual machines on different build system machines.
- Creating a web service that allowed employees to utilize the system with a user interface
- Assisting developers with problems they encountered with the company's build system.

## Work and Leadership Experience

### Past Employment

- Biomechanical Design, Soochow University
- Research Assistant, University of Waterloo Neurorobotics Lab
- Karate Instructor, 6-12 year olds

### University of Waterloo Engineering Society

- Vice President External
- Chair, Board of Directors

### Conrad Grebel University College

- Student Council Treasurer
- Dance Club Teacher
- Orientation Week Leader