

Wojtek Swiderski

Software Engineering
University of Waterloo
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<http://wojtechnology.com>
<https://github.com/wojtechnology>

Skills

- Proficient: **Java, C/C++, Python, LabView** (robotic systems) and **Android SDK**
- Experienced: server-side development using **NodeJS, MySQL** and **MongoDB**
- Familiar: web development in **JavaScript, CSS** and **HTML**
- Tools: **Git, Vim, SSH** and **Bash**

Technical Experience

Electrical Team Programmer

September 2014 – Present

University of Waterloo Hybrid Team

- Created a serial parser in C to transform raw engine sensor data into analyzable information for testing purposes
- Currently developing an Android application to display critical information to the human driver

Lead Programmer

September 2013 – June 2014

First Robotics Canada 4001 Robotics Team

- Implemented visual processing, sensor fusion and ladder logic using National Instruments LabView to design autonomous systems for competition robots
- Designed a desktop interface to control the robots, to display critical information on the driver station, and to manage the robots' onboard systems through the use of state machines
- Mentored programmers from two other teams

Chair and Webmaster

April 2011 – June 2014

United Nations York Catholic Assembly

- Designed and maintained the event website using JavaScript, CSS3, HTML5 and Adobe Photoshop
- Organized a Model United Nations event for 300 delegates

Projects

WoahPaper

December 2014

A fun, social Android application that allows users to change the wallpaper of other users' devices

- Developed all aspects of the application including the Android client and the server
- **Tools:** Android Studio, Java, NodeJS, MongoDB, Google Cloud Messaging

Scribbler Security

December 2014

A security system that uses visual processing to match patterns displayed by an Android device to a random passcode

- Created a visual processing algorithm used to determine the pattern being shown on the device
- **Tools:** Python

CityKit.ca | <http://citykit.wojtechnology.com>

November 2014

A web service that displays local deals on a map using data gathered from Groupon and Red Flag Deals

- Designed the server backend as well as the parser
- **Tools:** Ubuntu, Apache, NodeJS, MySQL, Google Maps API

Myo Pad

November 2014

A Windows client that allows users to write on a computer using position data from the Myo Armband

- Developed an engine that used integrals and linear mappings to transform raw data into coordinates on the screen
- **Tools:** C++, Myo Armband API, OpenGL

R Card

December 2013

A cross-platform desktop client that stores student account balances by student ID

- Built entire application including user interface, history tracking and file I/O
- **Tools:** Java, NetBeans, Swing

Education

Candidate for Bachelor of Software Engineering

September 2014 – Present

Honours Software Engineering, University of Waterloo, Waterloo ON

- **Term 1A GPA:** 4.0/4.0

Work Experience

Swim Instructor and Lifeguard

September 2013 – August 2014

Town of Richmond Hill

- Instructed groups of two to eight children, aged four to fourteen, swimming techniques, water safety and basic lifeguarding skills
- Responded to emergency situations following National Lifeguard Service guidelines
- Interacted with patrons, teaching them about safety precautions and dealing with personal concerns

Awards

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- | | |
|---|----------------|
| ○ Procom Ability Prize recipient | September 2014 |
| ○ Andrew Rok Foundation Scholarship finalist (one of eight finalists) | April 2014 |
| ○ President's Scholarship of Distinction recipient , University of Waterloo
(awarded to students with a 95% or higher entrance average) | March 2014 |
| ○ Top 25% in the University of Waterloo Euclid and Senior Canadian
Computing Competition contests | March 2014 |