

Wojtek Swiderski

Software Engineering
University of Waterloo

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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

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

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 | 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

Awards

- 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 March 2014
(awarded to students with a 95% or higher entrance average)