Wojtek Swiderski | Software Engineering
University of Waterloo

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Skills

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

Technical Experience

Electrical Team Programmer   September 2014 – Present
University of Waterloo Formula Hybrid Team
o Created a serial parser in C to transform raw engine sensor data into analyzable information for testing purposes
o 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
o Implemented visual processing, sensor fusion and ladder logic using National Instruments LabView to design autonomous systems for competition robots
o Designed a desktop interface that communicates with the robots, displays critical information on the driver station and manages the robots' onboard systems through the use of state machines

Chair and Webmaster   April 2011 – June 2014
United Nations York Catholic Assembly
o 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
o Developed all aspects of the application including the Android client and the server
o **Tools:** Android Studio, Java, NodeJS, MongoDB and 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
o Created a visual processing algorithm used to determine the pattern being shown on the device
o **Tools:** Python

CityKit.ca | citykit.wojtechnology.com | 24 Hour Startup Hackathon   November 2014
A web service that displays local deals on a map using data gathered from Yellow Pages Deals API
o Designed the server backend as well as the parser
o **Tools:** Ubuntu, Apache, NodeJS, MySQL and Google Maps API

Myo Pad | EngHack 2014   November 2014
A Windows client that allows users to write on a computer using position data from the Myo Armband
o Developed an engine that used integrals and linear mappings to transform raw data into coordinates on the screen
o **Tools:** C++, Myo Armband API and OpenGL

R Card   December 2013
A cross-platform desktop client that stores student account balances by student ID
o Built entire application including user interface, history tracking and file I/O
o **Tools:** Java, NetBeans and Swing

Education

Candidate for Bachelor of Software Engineering   September 2014 – Present
Honours Software Engineering, University of Waterloo, Waterloo ON
o Engineering and Mathematics Dean's Honours List (GPA: 4.0/4.0)
o President's Scholarship of Distinction, University of Waterloo (96.5% entrance average)

Awards

o Procom Ability Prize **recipient**   September 2014
o Andrew Rok Foundation Scholarship **finalist** (one of eight finalists)   April 2014
o **Top 25%** Canadian Computing Competition, University of Waterloo   March 2014