Alex Petrovich

2B Honours Geomatics | University of Waterloo ID#20566458

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Summary of Qualifications

- Strong knowledge of Geographic Information Systems (GIS) for spatial analysis, maps, and creating reports
- Extensive computer programming skills established through university courses and external projects
- Ability to problem solve and work efficiently in a group environment, as exemplified at Statistics Canada
- Excellent communication and leadership developed as a camp counsellor
- · Comfortably read and converse in Russian

Education

Candidate for Bachelor of Environmental Studies Honours Geomatics with minor in Computer Science

University of Waterloo
September 2014 — Present

Relevant Courses:

• Advanced GIS

Problem Solving in Geomatics

Spatial Databases

Advanced Environmental Research Methods

Technical Skills

Mapping Software / GIS: ArcGIS, QGIS, PCI Geomatica, CartoDB

Programming Languages: Python, JavaScript, Visual Basic, Scheme, SQL, C

Other: Arduino Prototyping, Surveying

Experience

Geographic Edit Analyst (Statistics Canada)

January 2016 - April 2016

- Tested the geographic coding software used by Census of Agriculture and created its reference guide
- Developed a Python script to request, parse, and store geocoding results from Google API
- Created a Visual Basic program that assessed the quality of Google API's address responses
- Collaborated with coworkers to find greenhouses in Ontario using satellite imagery classification
- Updated internal documentation and Wiki pages for the Geographic Edit team

Senior Counsellor (Bayview Glen Day Camp)

June 2015 — August 2015

- Developed attention to detail by being responsible for the safety of campers
- Improved leadership skills through organizing and overseeing camp activities

Projects

Smartwatch Controlled Skateboard (WearHacks 2015)

Controlled a motorized skateboard with a Pebble Smartwatch using an Android app and two microcontrollers

- Developed a Pebble app in C language to relay button presses to an Android app via Bluetooth
- Created an Arduino sketch to control a brushless motor with electrical output
- Solved technical issues and created workarounds while under a strict time limit

Planning a New Police Station in Waterloo Region (GEOG381: Advanced GIS)

Created a report which proposes new police station locations in the Waterloo Region using network analysis

- Found, cleaned, and used data from several external sources
- Produced two maps showing response times and service areas of the new police stations