Alex Petrovich

3A Honours Geomatics | University of Waterloo ID#20566458

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Summary of Qualifications

- Enthusiastic software developer comfortable in fast-paced workplaces, as exemplified at Freckle IoT
- Strong computer programming skills established through university courses and professional experience
- Excellent performance in group environments learned while collaborating on software projects

Technical Skills

Programming Languages:Python, Go, JavaScript, C, Assembly, SQLTechnologies:Bash, Git, Elasticsearch, PostgreSQLTools:GitHub, JIRA, Bitbucket, Jenkins, IntelliJ, GIS

Experience

Freckle IoT

Quality Engineering

September 2016 - December 2016

- Designed and developed a client-facing API in Go, halving our business partners' integration time
- Wrote Python scripts to perform fast geohash lookups, giving valuable insight to our sales team
- Expanded Freckle's data processing in Python, creating analysis reports using Elasticsearch queries
- Optimized JavaScript code of internal admin website, reducing load times by up to 80%
- Created the company's SQL schema in Amazon Redshift, allowing for a quick database migration
- Built automated web and API testing programs using Python and Behave

Statistics Canada

Geographic Edit Analyst

January 2016 — April 2016

- Developed Python scripts to request, parse, and store geocoding results from Google API
- Performed regression and black box testing of Statistics Canada's internal geographic software, ensuring its successful use in 2016 Census

Projects

Fightbros

December 2016 - Present

Actively contributing to the development of a web browser fighting game

- Created character trails and other server-controlled visual objects
- Found and solved numerous bugs in JavaScript client and NodeJS server codebases

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 phone via Bluetooth
- Wrote an Arduino program to control an electric motor mounted to a skateboard
- Solved technical issues and created workarounds while under a strict time limit

League of Legends Ping Analyzer

January 2017

Python program that advises when not to play video games, based on server connection latency

• Used MongoDB for data storage and to enable analysis over large time periods

Education

Candidate for Bachelor of Environmental Studies Honours Geoma

Honours Geomatics with Computer Science Minor University of Waterloo September 2014 — Present