Alex Petrovich

3A Honours Geomatics | University of Waterloo ID#20566458

GitHub
LinkedIn

1-647-712-4646
acpetrov@uwaterloo.ca

Summary of Qualifications

- Enthusiastic software developer comfortable in fast-paced workplaces, as exemplified at Freckle IoT
- Excellent performance in group environments learned while collaborating on software projects

Technical Skills

Programming Languages:	Python, Go, JavaScript, C, Assembly, SQL
Technologies:	Bash, Git, Elasticsearch, PostgreSQL
Tools:	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 Geomatics with Computer Science Minor
University of Waterloo
September 2014 — Present