

Alex Petrovich

3B Honours Geomatics | University of Waterloo ID#20566458

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Summary of Qualifications

- Hard-working software engineer comfortable in fast-paced and demanding startup environments
- Pursuing an interest in big data processing, sparked by working at Rubikloud Technologies

Technical Skills

Programming Languages:	Java, Scala, Python, Go, C
Technologies:	Spark, HBase, Elasticsearch, Redis, PostgreSQL
Tools:	Docker, Kubernetes, Microsoft Azure, Jenkins, GIS

Experience

Rubikloud Technologies

Software Engineer

April 2017 — September 2017

- Wrote data processing Spark jobs for large datasets, greatly speeding up ETL ingestion times
- Created Docker definitions and Kubernetes deployments for entire ETL pipeline
- Contributed to Rubicore's ETL control layer in Java, fixing bugs and increasing fault tolerance
- Deployed Spark and HBase clusters, and other infrastructure resources on Microsoft Azure
- Submitted a pull request to github.com/Shopify/ejson project written in Go, adding support for encrypting JSON array blocks using multiple public keys

Freckle IoT

Quality Engineer

September 2016 — December 2016

- Designed and developed a public-facing API in Go, halving our business partners' integration time
- Wrote Python scripts for instant geographic lookups, giving valuable insight to our sales team
- Created the company's SQL schema in Amazon Redshift, allowing for a quick database migration
- Built automated web and API test suites using Python and Behave

Projects

Smartwatch Controlled Skateboard

WearHacks

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

- Developed a Pebble app in C to relay button presses to an Android phone
- Wrote an Arduino program to control an electric motor mounted to the skateboard
- Solved technical issues and created workarounds while under a strict time limit

Biking Hazards Reporter

acpetrov.ca/geog487

Created a full-stack web application for reporting biking hazards

- Designed a simple webpage for submitting hazard reports using a web map
- Hosted a backend server and PostgreSQL database on an AWS EC2 instance

Education

Candidate for Bachelor of Environmental Studies

Honours Geomatics with Computer Science Minor
University of Waterloo

September 2014 — Present