### Savannah Ostrowski

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### PROFESSIONAL EXPERIENCE

#### **Software Engineer** // DroneSeed

**Seattle, WA** (Jan. 2017 - Jul. 2017)

- Researched, designed, and implemented algorithms for automating multi-vehicle drone flight path selection and obstacle avoidance over hundreds of acres of land using Python (Shapely) as the company's only engineer
- Built route data visualization tools to validate selected drone flight paths and spray patterns with Python
- Coordinated with operations and sales leads to discuss operational logistics for executing customer jobs
- Wrote comprehensive unit and integration tests, and performed four days of field testing to test drone routes

### **Software Developer Intern** // Sequence

San Francisco, CA (Sept. 2015 - Dec. 2015)

- Refactored a nutrition calculator web application using React to improve flexibility for adding new features
- Worked alongside designers to prototype new features and fix bugs for high-profile client websites
- Improved a client's content management system by creating HTML module templates to allow rapid page creation

# **Software Developer Intern** // TheRedPin Inc.

Toronto, ON (Jan. 2015 - Apr. 2015)

- Built a web crawler with node.js to find invalid URLs in a site map of 3.7 million URLs
- Developed features, fixed bugs, and automated quality assurance work flows using JavaScript, HTML, and SASS

### **Geomatics Analyst Intern** // KBM Resources Group

**Thunder Bay, ON** (May 2014 - Aug. 2014)

- Managed hundreds of gigabytes of spatial data in multi-year project by implementing best practices for spatial databases and version control infrastructure
- Automated spatial data workflows using Python to reduce delivery time by several days

#### TEACHING EXPERIENCE

#### **Teaching Assistant - Advanced GIS** // University of Waterloo

Waterloo, ON (May 2015 - Aug. 2015)

- Taught students about algorithms (e.g. Getis-ord Gi\*, k-nearest neighbors) to help them produce data visualizations as well as Python scripting for automating tedious spatial data analysis work flows
- Helped students build and troubleshoot a scripting tool to scrape Twitter using Python to gather, synthesize, and generate compelling data visualizations based on tweet data and geographic location

### RELEVANT PROJECTS

# Limon – An Interface for Locally Stored Videos // Personal Project

**Seattle, WA** (Sept. 2016 – Oct. 2016)

 Built an application using Java and React that finds movies on your computer, queries the OMDb API for information, and displays each movie and its corresponding information in the browser for easy viewing

#### **GIS Capstone Project** // University of Waterloo

**Waterloo, ON** (May 2015 – Aug. 2015)

- Designed a study that used temporal analysis to quantify the effects of students on sustainable development
- Built an <u>interactive web application</u> to visualize findings using Leaflet, geoJSON and Mapbox (code on <u>GitHub</u>)

# SKILLS AND INTERESTS

Skills: Python, Java, JavaScript (React, Leaflet, node.js), SQL

Interests: Spatial Data, Data Visualization, Machine Learning,; Travel, Nutrition, CrossFit, Cooking, Hiking

#### **EDUCATION**

Bachelor of Environmental Studies - Geomatics // University of Waterloo Waterloo, ON (Jun. 2016)

• GPA: 3.7; Dean's Honors List