

# MEGAN SORENSON


## Searching for Coop/Internship Roles

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UBC Science Co-op 

## EXPERIENCE

### Software Developer Intern SAP


-  January - August 2023    📍 Vancouver, BC
- Developed Python Flask applications to establish a universal standard for SAP technology reselling, increasing efficiency and accuracy for companies through metric calculation and processing.
  - Completed a KMeans cluster analysis on calculated metrics used to focus business priorities based on region, industry, and other company metrics.
  - Created a unit test suite that increased code coverage by 40 percent.
  - Created a MS Teams notification system that was integrated into different stages of the application to alert internal members about hidden bugs during metric calculation or data collection.
  - Utilized: REST APIs, Python, Azure Machine Learning Tools, Machine Learning, SQL, NLP, Flask, Jenkins

### Data Science Intern University of Calgary, Canadian Animal Task Force


-  May - September 2021    📍 Calgary, AB
- Independent project that utilized a decade's worth of raw data to determine whether veterinary data can be used to effectively assess impact of spay-neuter clinic charities in Alberta.
  - Identified changes for the organization's data collection methods to allow for future assessments; data collection feedback was implemented in over a dozen clinics in 2022.
  - Utilized: R, Data Analysis, Data Cleaning, Data Communication, Research

## PROJECTS


### Parking Airbnb: NwHacks 2023 Project [GitHub]

-  January 2023
- Created a web application that allows users to post and book parking spaces and manage their stalls and bookings.
  - Lead the creation of the database and backend server using sqlite and Flask, and helped the frontend team integrate our API into their code.
  - Utilized: Python, Flask, JavaScript, CSS, HTML, full stack

### World Of Wordle Java Application [GitHub]


-  September 2022 - December 2022
- Created a wordle-inspired Java application with extended options to play simultaneously with one, two, or three boards.
  - Utilized Java Swing to create a GUI where guesses are color populated based on their accuracy and included serialization of game state to allow time-interrupted playing.
  - Created a unit testing suite with 100 percent code coverage.
  - Utilized: Java, JUnit, json Serialization, Event Logging, Software Construction

### Optimal Shipping Routes in the Atlantic [GitHub]

-  September 2021 - January 2022
- Utilized historical datasets to create optimal shipping routes that avoid 90 percent of zooplankton hotspots using ArcGIS Pro software.
  - Developed a cost-surface raster layer that was minimized for distance and plankton abundance that contributed novel findings to the academic knowledge base.
  - Utilized: ArcGIS Pro, Spatial Statistics, Story Maps, Python, Research

## EDUCATION

### 3rd Year Bachelor of Computer Science (BCS)

University of British Columbia, GPA: 4.3/4.3  
 September 2022 - May 2025

### BSc. Environmental and Conservation Sciences in Conservation Biology

University of Alberta, GPA: 3.7/4.0  
 September 2017 - May 2022

## SKILLS/COURSEWORK

Python

R

HTML

CSS

Java

JavaScript

SQL

REST APIs

Flask

NLP

Machine Learning

Git/GitHub

Visual Studio Code

JUnit

dplyr

tidyverse

ggplot2

pandas

Problem Solving

Spatial Statistics

Data Visualization

Algorithms

Data Cleaning


Regression Analysis

Data Structures


Functional Programming

## OTHER WORK


### Circuit Sculptures Personal Hobby

-  January 2023 - Ongoing
- Creating artistic electronic sculptures using IC chips, copper wire, LEDs, clocks, etc.
  - Individually designing all stages of the sculptures; including configuration, prototyping, soldering.

### NASA Space Apps Web App [GitHub]

-  October 2022 (Hackathon)
- Lead the creation of a JavaScript game using Phaser3 that allows for player navigation with health depreciation when obstacles are hit.
  - Incorporated real solar data from NASA satellites to trigger the intensity and type of obstacles present in the game.

### Fridge Poetry App [Web App]

-  August 2022 (Hackathon)
- Created a simple web app using HTML, CSS, and JavaScript that allows users to drag and drop personalized words to create fridge poetry.
  - Incorporated sharing of a user's poetry in the browser by saving the current state of the frame as an image.