MEGAN SORENSON

Searching for: Coop Fall/Winter 2023

@ msorenso@student.ubc.ca   github.com/MeganSorenson   megansorenson.ca

Vancouver, BC   780 221 1904   in linkedin.com/in/megsorenson

UBC
Computer Science

EXPERIENCE

Data Science Intern
University of Calgary

May – September 2021   Calgary, AB

- Independent project in collaboration with the Canadian Animal Task Force (CATF) and Dogs Trust Worldwide.
- Analyzed the effectiveness of dog clinics over time using canine clinic data.
- Outlined changes for the organization's data colection methods to improve the quality of future assessments; feedback implemented in 2022 clinic data collection.

Sustainability R&D Co-op
Gaia Protein

January – June 2021   Calgary, AB

- Provided the literature basis for improving the sustainability and efficiency of cricket farming practices within the company.
- Created a handbook used for new-hires at the company as of June 2021.

PROJECTS

World Of Wordle Java Application

September 2022 - Ongoing

- A wordle-inspired Java application where players can choose to guess one, two, or three words simultaneously while trying to maximize their score.
- Includes serialization of game state to allow time-interupted playing of a single game.
- Implemented both a terminal-based UI and GUI.
- *Utilized:* Java, JUnit, Software Construction

Canine BCS Approximator [Abstract]

May – September 2021

- Developed a novel method for accurately approximating canine body condition score (BCS) using canine data and historical growth curves.
- Created opportunities to assess the impact of dog clinics where BCS data was not collected from veterinarians and volunteers.
- *Utilized:* R, Python, Statistics, Data Science

Optimal Shipping Routes in the Atlantic [GitHub]

September 2021 – January 2022

- A GIS project that utilized historical datasets by creating optimal shipping routes that avoid 90 percent of zooplankton hotspots.
- Contributed to the academic knowledge base by developping a cost-surface raster layer that was minimized for distance and plankton abundance.
- *Utilized:* ArcGIS Pro, Spatial Statistics, Story Maps, Python

Arthropod Data Project [GitHub]

September 2021 – January 2022

- Determined whether there was a correlation between climate variables and insect abundance using two decades of presence/absence data.
- Applied bootstrapping methods to find what combination of temporal climatic events would result in a boom/bust for an insect group.
- *Utilized:* R, Data Science, Data Visualization

EDUCATION

3rd Year Bachelor of Computer Science (BCS)
University of British Columbia

September 2022 – May 2025

BSc. Environmental and Conservation Sciences in Conservation Biology
University of Alberta, GPA: 3.7

September 2017 – May 2022

SKILLS/COURSEWORK

Python   R   HTML   CSS   Java   JavaScript
Git/GitHub   Visual Studio Code   IntelliJ IDEA
JUnit   LaTeX   dplyr   Problem Solving
tidyverse   ggplot2   Spatial Statistics
Data Visualization   Algorithms   Data Cleaning
Regression Analysis   Data Structures
Functional Programming

OTHER WORK

Head Teaching Assistant
University of Alberta

September 2020 – May 2022

- Lead a laboratory session of 20 undergraduate students in the Department of Renewable Resources.
- Created and lectured material, supervised fieldtrips, and graded exams.

Battlesnake Competition Team Member
UBC Data Science Club

September 2022 – Ongoing

- Using reinforcement learning to compete in a 2D grid world against multiple other agents.
- Aiming to participate in the Winter 2023 competitive season.

NASA Space Apps Web App [GitHub]

October 2022

- A JavaScript game made using Phaser 3 that lets the player collect space garbage while avoiding obstacles generated using real solar data.
- Created during the 2022 NASA Space Apps Hackathon.

Fridge Poetry App [Web App]

August 2022

- A simple web application made using HTML, CSS, and JavaScript where you can create and share fridge poetry.
- Created during the 2022 Ignition Hacks Hackathon.