UBC Science Co-op



T: 604.822.9677 | F: 604.822.9676 | science.coop@ubc.ca | www.sciencecoop.ubc.ca

Lucy Hao 2nd year Computer Science Student

haolucy.tech l.hao@alumni.ubc.ca

EDUCATION

University of British Columbia

Sep 2019 - Jan 2024

Bachelor of Science in Computer Science, GPA: 85.9%

Coursework and Certifications: Software Construction, Data Science Bootcamp 2019 (Udemy), Web Programming in Go (Udemy), Deep Learning Specialization (Current)

SKILLS (* currently acquiring)

Languages Python, Java, R, Dart, Golang*, C++*

Technologies

JUnit, Flutter, Firebase, Flask, pandas, numpy, MongoDB*

Development Tools

Android Studio, Visual Studio, Intellij, Git, RStudio, HTML/CSS

PROJECTS

USA Spending + Incarceration Data Visualization

Aug 2020

- Implemented data cleaning in **Python** with **Pyspark** and **Pandas** to clean and manipulate data. Visualized data with Dash to show trends in finances, incarceration and trends between finances and incarceration.
- Created linear regression **Tensorflow** model with data on USA spending, race demographics and US Bureau of Justice to predict the incarceration population of an entire population. Able to achieve a slope error of +/- 10%.

Nutrin Food Tracking App

Jul 2020 - Current

- Used **Flutter Framework** and **Firebase** to develop a macronutrient focused food tracking app. Implemented Model View Controller design pattern to which makes code manageable and extendable. Gathered food nutrition data from DFA **REST API**.

EcoEats - (Top 5 out of 62 @ cmd-f)

Mar 2020

- In 24 hours as lead programmer of group of 4, developed an **Android app** in **Java** that brings awareness to the carbon footprint of consumers' meals and advocates for more carbon friendly products. Awarded **Realtor Best Search Experience** and **Wolfram Award**.
- Used Google Cloud Vision REST API to detect the image and retrieved the carbon footprint of the food.

Food and Fridge Tracker

Jan 2020 - Feb 2020

- Nutrition and Food Tracker in Java that implements object oriented design patterns.
- Used **GSON** to parse JSON responses from USDA Food Database **REST API** to create a search experience for users to search for foods they want to add to their tracker. Frontend built with **Java Swing**.

Awards

- Hackathons: nwHacks (Top 35 Wolfram Award, Voiceflow Award), cmd-f (Finalists, Wolfram Award, Realtor Award)

Experience and Volunteering

Mentor - *connect-f (nwPlus)*

Remote

Jul 2020 - current

- Mentoring high-school aged females on different computer science career paths and creating tutorials to teach introductory programming.

Co-President - SWC Cancer Society Club

Calgary, AB

- Managed 10 students and helped create and run innovative fundraisers to engage the student community, raising over 400 dollars for the Canadian Cancer Society.

Sep 2017 - June 2019