



# Lucy Hao

403-401-3096 | hao.lucyy@gmail.com | haolucy.tech | github | linkedin

## EDUCATION

**University of British Columbia** - GPA: 86.3%

Sep 2019 - Jan 2024

2nd Year BSc. in Computer Science and minor in Microbiology & Immunology

*Certifications and Coursework:* Software Construction (UBC), Data Science Bootcamp 2019 (Udemy), Neural Networks and Deep Learning (Coursera), Improving Deep Neural Networks (Coursera), Sequence Models (Coursera), Structuring Machine Learning Products (Coursera), Natural Language Processing Specialization (in progress), Introduction to Data Science (UBC)

## SKILLS (\* means acquiring)

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

*Technologies* JUnit, Flutter, Firebase, Flask, pandas, NumPy, sci-kit learn, TensorFlow\*

*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%.

### Food and Fridge Tracker

Apr 2020

- Developed Nutrition and Fridge Tracker in **Java** that implements **object-oriented design** patterns.
- Used **GSON** to parse JSON responses from the 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**.

### Recipe Nest - (Top 30 out of 145 @ nwHacks)

Jan 2020

- Lead on chatbot app that finds recipes based on diet and ingredients. Deployed on multiple platforms such as Slack and Messenger. Implemented backend with **Python 3.7** and **Flask**. Frontend created with **HTML5/CSS3** and **Bootstrap** framework.
- Trained **Google Cloud's Dialogflow** to extract information from the user's replies to perform an intelligent search of refined recipes.

## AWARDS

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

## VOLUNTEERING

**Mentor** - *AIHacks*

Sep 2020

- Taught young females about version control, opportunities in data science, cloud platforms, and helped hackers by bouncing off ideas and fixing issues.
- Engaged personally with young women and helped them show pathways in computer science.

**Mentor** - *connect-f (nwPlus)*

Jul 2020 - Current

- Mentoring high-school-aged females on different computer science career paths and creating Python tutor high-school-aged introductory programming, web development, and data science.