

COLE HAO WU

CONTACT

+1 (778) 551-5599

hwa129@sfu.ca



github.com/Cole9712



1526 Como Lake Avenue,
Coquitlam, BC V3J 3P6

EDUCATION

B.Sc. in Computing Science

*Simon Fraser University,
Burnaby, BC*

GPA: 3.67 / 4.33

Sept 2018 - Expected Apr 2022

Associate of Science: CS

*Langara College,
Vancouver, BC*

GPA: 4.00 / 4.33

Sept 2017 - May 2018

PROGRAMMING LANGUAGES

- C++
- TypeScript / JavaScript
- Java
- Go
- Python
- Haskell
- Julia
- x86 Assembly Language

SCRIPTING LANGUAGES

- SQL
- HTML & CSS

TRANSFERABLE SKILLS

- Eager to take training to develop new skills
- Meeting assigned deadlines through prioritizing and planning
- Perform better under high-pressure situations through my leadership experience
- Bi-lingual in English and Mandarin

PROJECT EXPERIENCE

Facial Detection Web System

<https://git.io/JLXyg>

Nov 2020 - Dec 2020

This playplot project created a web system that can perform facial detection and face swapping from user uploaded images.

- Used Vue as front-end framework and Go as back-end server.
- Implemented facial detection and face swapping using Python with openCV.
- Added image search features by using Pixabay.com API to let users be able to search images online and perform facial detection on them.
- Processed users' uploaded image to detect face or swap face.

Daily Calories and Nutrition Calculator (Android App)

<https://git.io/JL184>

Sept 2020 - Present

Used Java and Android Studio to create an Android Application to record users' daily calories intake.

- Constructed SQLite database with users' input data to record users' meals.
- Calculated users' daily base calories and nutritional needs based on users' heights, weights and ages.
- Generated current nutritional and calories intake based on user's meal input.
- Integrated Canadian Nutrient File into data base to let users search food from built-in database.

Lost Memories (Arcade-style 2D game), CMPT 276

Jan 2020 - Apr 2020

Used Java with Maven to develop a PC game which the player controls a main character to get his lost memories, in order to pass the game, the player should avoid barriers and chasing enemies.

- Designed UML class and use case diagram for the overall structure of the program.
- Implemented A* Search Algorithm to let enemy chase the main character.
- Developed graphical user inference of the gaming using Java Swing and Canvas to improve user experience visually.
- Organized and collaborated with team members via Git to check the progress twice a week.

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TOOLS

- Visual Studio Code
- Android Studio
- Adobe Photoshop
- Adobe Illustrator
- Adobe After Effect
- MATLAB
- Git
- Vagrant
- MS Word, Excel and PowerPoint
- Maven
- R Language

INTEREST

- FPS Video Gaming
- Food inspired Travelling

PROJECT EXPERIENCE (CONTINUED)

Data Analysis and Anomaly Detection, CMPT 318

Oct 2019 - Nov 2019

Analyzed 3-year scope Electronic power grids' data using R language to do data analysis and detect anomaly using various methods etc. point anomaly and moving average method.

- Built Hidden Markov Model to calculate log-likelihood of training data, getting anomalies of different data sets.
- Analyzed the ways of optimizing balance between recall and precision as well as F-score in data.

WORK EXPERIENCE

Summer Assistant Engineer Intern

LK Power Electronics Technology Co., Ltd., Suzhou, China May 2019 - July 2019

- Tested mobile 110V power generator product in laboratory by consistently record output data and making sure the expected data has good results.
- Communicated with foreign costumers to get details of expecting products.
- Soldered and assembled PCB circuit boards precisely for different testing purposes.

Teaching Assistant & Peer Tutor

Beeta International Education Group, Vancouver, BC Oct 2017 - Jun 2018

- Held evening self-study session for high school students by organizing daily study tasks.
- Answered student's questions about coursework during self-study sessions.
- Tutored high-school-level Physics and Mathematics for students during weekends.

VOLUNTEER EXPERIENCE

SFU Computing Science Peer Tutor

Jan 2021 - Present

- Tutored students who were taking lower division computing science courses via video conference according to scheduled timetable.
- Solved students' questions regarding course material and exercises to improve their academic performance.
- Prepared tutoring material before tutoring session to track pace of courses.

Leader of international summer camp

July 2017

- Leded Summer camp for Chinese high school students to study and go sightseeing in British Columbia.
- Planned and Prepared activities for summer camp i.e., ice breaking and team building activities.
- Managed students' daily schedule on a schedule created Excel.