# COLEHAOWU

# CONTACT

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#### EDUCATION

#### **B.Sc.** in Computing Science

Simon Fraser University, Burnaby, BC

GPA: 3.79 / 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

# S C R I P T I N G L A N G U A G E S

- 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

# Custom Reliable Data Transfer Protocol, CMPT 371

#### https://git.io/JG65N

Apr 2021

A UDP file transfer protocol written in Python providing reliability, flow control and congestion control.

- Worked with teammate to implment using Python and UDP socket, but is connection-oriented.
- Provided reliability, flow control and congestion control algorithms.
- Analyzed its performance by using network simulation tools and wrote into report which also contains features
- Provided Command Line Interface for potential usage for server and client.

#### **Facial Detection Web System**

#### https://git.io/JLXyg

Nov 2020 - Dec 2020

This ployglot 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 - Dec 2020

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.

# COLE HAO WU

# TOOLS

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

# INTEREST

- FPS Video Gaming
- Food inspired Travelling

# PROJECT EXPERIENCE (CONTINUED)

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

Jan 2020 - Apr 2020

Worked in a agile team to use 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.

- 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.

# 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.
- $\bullet \quad \hbox{Answered student's questions about coursework during self-study sessions.}$
- 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 regrading 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

- Leaded 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.