

Ronney Lok (he/him)



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Technical Skills

- Python, C/C++
- Git, Beautiful Soup, Selenium, Flask, Twilio API, Google Maps API, ARCGIS, MATLAB
- Testing, debugging, troubleshooting, documentation
- Linux, Mac OS, Windows

Transferable Skills

Teamwork:

- Understands that being flexible is important in team setting
- Able to professionally and effectively communicate technical concepts

Attitude and Character Development:

- Enjoys the process of learning difficult concepts to build resiliency
- Recognizes positivity is necessary for effective output in the workplace

Personal Projects

MUSIC ORGANIZER

MAY - AUG 2022

- Developed a computer program that helps users store songs in a playlist. Coded in C++.
- Created with a linked list to optimize both space and time efficiency as music playlist can become too large for other data structures to remain efficient.
- Included implementations such as insert, remove, and swap.
- Aided me in learning how to effectively test for edge cases and debug code to maximize robustness

HOSPITAL BOT

MAY - JUN 2022

- Created a texting chat bot that allows users to text their address to a bot. The bot then texts back the locations of the closest hospitals as well as their wait times. Coded in Python.
- Used web scraping tools, Selenium and BeautifulSoup to extract the needed information from the hospital wait time website.
- Used Google Maps API to obtain distance information would be used to calculate distance from user to the hospital
- Combined Twilio with Flask, Gunicorn, and Heroku to deal with the server side and the communication from user to bot.
- Aided me in learning about the server side of programming, web scraping, as well as employing the help of API's to obtain information.

Technical Projects/Experiences

DATA STRUCTURES & ALGORITHMS COURSE CMPT225 DATA STRUCTURES & ALGORITHMS I

SEP - PRESENT

- Utilizing common data structures to create meaningful abstract data types in C++.
- Analyzing common algorithms and applying them effectively.
- Optimizing time and space efficiency for large data sets.

TSP SOLVER CMPT125 INTRODUCTION TO COMPUTER SCIENCE & PROGRAMMING II

JAN-MAY 2022

- Programmed an algorithm to solve the NP-complete Traveling Salesman Problem. Coded in C++ with a focus in OOP.
- Implemented by using a smallest increase heuristic to determine which path to take in each iteration.
- Allowed me to learn how to be both efficient and accurate in applying coding algorithms to math related problems.



Technical Projects Continued.

IMAGE PROCESSOR **CMPT120 INTRODUCTION TO COMPUTER SCIENCE AND PROGRAMMING I** **SEP - DEC 2020**

- An image editing tool that takes in an image and alters the image according to user commands. Coded in Python.
- Created implementations such as inverting, flipping, rotating, brightness, filters, pixelation, and binarizing.
- Helped me understand how the computer perceives images as a combination of RGB pixels, and how altering different aspects of it leads to different outcomes. Earned a 90% on the project.

Other Work Experience

SERVER/COOK **BOILING POINT, VANCOUVER, BC** **JUN 2021- MAR 2022**

- Worked as both a server and cook demonstrating flexibility in different roles.
- Trained new recruits for both the front and backend of the restaurant.
- Earned an Employee of the Month Award for always maintaining an uplifting attitude.

SEASONAL ASSOCIATE **HARRY ROSEN, VANCOUVER, BC** **DEC 2019 - JAN 2020**

- Assisted experienced sales advisors which helped me develop professional etiquette.
- Worked in different teams every week, which allowed me to gain an understanding of how a clothing store runs.
- Developed resilience from working long 12 hour shifts on the floor during holiday season.

Volunteer/ Extracurricular Experience

LOGISTICS DIRECTOR **KILLARNEY ROBOTICS TEAM(HIGHSCHOOL ROBOTICS TEAM), VANCOUVER, BC** **SEP 2019 - JUN 2020**

- Worked with peers to create a 100 pound robot to participate in the 2020 FIRST Robotics Competition in Victoria B.C.
- Managed a Krispy Kreme fundraiser across multiple locations across Richmond, Vancouver, and Burnaby which raised over \$600 to help with robotics funds.
- Planned the design of the robot and coordinated with the local highschool community to borrow tools for welding and putting the robot together.
- Drafted a sponsorship proposal to First Robotics which helped obtain \$6000 in parts for the robotics team

STAFF CADET INSTRUCTOR **888 AVENGER SQUADRON AIR CADETS, VANCOUVER, BC** **SEP 2014 - JUN 2019**

- Taught basic aviation components and leadership to younger cadets through interactive lessons which helped them build their discipline, and knowledge on aviation.
- Planned a weekend long camp for cadets to learn about survival, range, and search & rescue which helped them pass their level assessments.

Education

BACHELOR OF APPLIED SCIENCE IN COMPUTING SCIENCE WITH A BUSINESS MINOR, SFU **SEP 2020 - PRESENT**

- Simon Fraser University, Burnaby, BC

Interests

PIANO

Grade 10 piano

READING

7 Habits of Highly Effective People

HIKING

Panorama Ridge