Mabel Ling

Vancouver, BC

Technical Skills

Languages: C, C++, Python, Java, HTML/CSS, JavaScript, MATLAB Frameworks/Libraries: P5.js, Processing, Arduino, MicroPython OS/Developer Tools: Linux, Windows, Git/GitHub, Visual Studio Code

Experience

SkyBox Labs Nov – Dec 2020

Marketing Data Analyst

Burnaby, BC

- Automated scripts to scrape sales data from the gaming industry from over 20 review websites.
- Performed sentiment analysis of customer reviews from numerous triple-A video games.
- Met weekly with team to discuss progress and present findings from the research.

Projects

Shift Register | MicroPython, Raspberry Pi Pico, C/C++, Arduino Uno

Jun - July 2023

- Built a hardware display representing a computer register using electronic components for integrated circuits.
- Optimized the memory usage and run-time by migrating the MicroPython source code to C with Arduino libraries.
- Integrated both the software and hardware and debugging the interactions between the two facets.

Pet Imagine Classifier | Python

Feb – Apr 2023

- Implemented a 4-layer neural network using Python and various libraries to handle the data set.
- Managed multiple data sets of over 2000 images of cats, dogs, and other pets to used to train and test the classifier.
- Trained the network and optimized it using method including gradient descent, regularization, and weight initialization.

Stock Price Visualizer | MATLAB

Jan - Apr 2023

- Programmed a data organizing script that read isolated stock data and produced sleek visual graphics.
- Analysed exported graph data and visuals for website and presentation use.

TSP Solver $\mid C, Linux$

Jan - Apr 2022

- Ran greedy algorithms to explore solutions for the travelling salesman problem.
- Documented the comparisons of results between each algorithm in a set up the development environment in WSL with Ubuntu and GDB debugger.

Leadership / Extracurricular

SFU Computing Science Student Society

Jan 2023 – present

Active member, Executive-at-Large, Councillor

Burnaby, BC

- Advocating for CS student at the university level for quality of life and funding for hackathons and opportunities.
- Overseeing educational events such as beginner Git and Linux workshops for first and second year students.
- Spearheading the planning and organization for the society's large-scale annual career networking trip to Silicon Valley.

SFU Women in Computing Science

May 2023 - present

Active member, Treasurer

Burnaby, BC

- Hosting mentor and alumni chats with established professors and researchers to provide opportunity to young women to learn more about career opportunities.
- Managing the funding and financial operations for technical skills workshops, alumni panels, networking events.

VikingsDev Coding

Sep 2018 – Jun 2021

Mentor, Workshop Organizer

Burnaby, BC

- Tutored coding projects and organized bi-weekly workshops with turnout rates of 20-30 students per workshop.
- Networked high school students with industry professionals and guest speakers from game studios and local colleges.

Education

Simon Fraser University

Sep. 2021 - May 2025

Bachelor of Science in Computing Science