

Owen Liu

📍 Burnaby, Canada ✉ owenliu31@gmail.com ☎ 7789260272 in Owen Liu 🌐 owenliu01

🧠 Technical Skills

Programming Languages

Java | JavaScript | C++ | C# | C | HTML | Python | PHP | CSS | SQL | Axios | Node.js | Haskell | Rust

Software

Visual Studio Code | Atom | Unity | Github | Microsoft Office | Photoshop | Drupal | MySQL

📁 Projects

AI Vacuum [🔗](#)

May 2023 – Aug 2023

- Programmed different search algorithms in Python such as BFS, DFS, UCS, and A* to efficiently detect dirt locations within the frontier of the vacuum. As well as adding cost to movements and turns to determine route costs and measure efficiency.
- Highlighted chosen paths with blue and the rooms searched with red to show the AI thought process for each search algorithm and proper implementation.
- Created a 2D grid for a vacuum agent to explore and traverse to find dirt locations which solidified agent and environment interaction understandings.

Valorant Database [🔗](#)

May 2022 – Aug 2022

- Created a database on the game Valorant using Node.js, HTML, Axios, and MySQL to allow for ease of use and quick efficient retrieval from storage.
- Utilized Node.js and Axios to go beyond the project requirements and create a project more aligned with modern standards and future implementations, thus achieving a 100 on the final project.
- Coded and structured the database to connect the front end to the back end allowing functionality such as insertions, retrievals, and deletions of database entities from user inputs through the GUI.

Hotel Booking System [🔗](#)

Jan 2021 – Apr 2021

- A hotel booking system written in Java with OOD in mind that allows for multiple bookings without overlap or collision in dates to produce well-written code and a highly functional application.
- Added server functionality to allow multiple users to access the booking system, but also created a locking mechanism to avoid multiple user synchronization issues with booking and requests to provide a seamless experience.

Mixed Feelings Game, UBC Game Jam 2020 [🔗](#)

Feb 2020 – Feb 2020

- Implemented the movement in the game using C# and Unity to provide the basic and fundamental parts to allow the player to be able to move in the game and run smoothly between each level.
- Created the loneliness level to the game by utilizing Unity to make and test the level, resulting in the group finishing the challenge of creating a game within the time constraint of 3 days.

🏢 Professional Experience

Roasty Jack BC Website, Web Developer

Aug 2020 – Dec 2020

- Programmed a website using a combination of HTML and CSS tools to accurately present and advertise the business, which allowed them to reach more potential customers and partners.
- Implement and maintain the backend of the website using MySQL, drupal767, and PHP to further add functionality to the website in the future, such as checkout and profiles, providing more seamless and convenient transactions for both parties.

🏢 Additional Work Experience

Sales Associate, Champs Sports

Oct 2018 – present
Burnaby, Canada

- Maintain high conversion rate of customers and customer satisfaction, which helped foster people skills and responsibility.
- Train new employees by showing expected daily tasks and protocols, that developed communication and leadership skills.

Guest Experience Leader/Crew Trainer, McDonald's

Jun 2017 – Jul 2018
Burnaby, Canada

- Deliver food quickly and efficiently under high pressure throughout the day, allowing the improvement of organizational and time management skills.
- Provide exceptional service using social skills to increase foot traffic and obtain a census on customer satisfaction.

🎓 Education

BSc - Computing Science, Simon Fraser University

Jan 2020 – present
Burnaby, Canada

Associate of Computer Science, Langara College

Sep 2018 – Dec 2019
Vancouver, Canada