

# Owen Liu

📍 Burnaby, Canada   ✉ owenliu31@gmail.com   ☎ 7789260272   🔗 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 | SAP | GIS

## 📁 Professional Experience

### Information Systems Co-op, FortisBC - Engineering and Operations

May 2024 – Dec 2024

- Tested monthly security patches and SAP support packages that cover several SAP modules such as Sales and Distribution, Asset Management, CRM, Controlling, Project Management, Plant Maintenance, HR, Meter Management, and aspects of SAP IS-U, increasing the reliability and functionality of all interactions between SAP, GIS, and field management software.
- Tested key aspects of FortisBC's Automated Meter project consisting of SAP integrated with field management software, ensuring requirements function as specified, no regression impacts, while maintaining the quality of the project.
- Worked with the software vendor to remedy defects with the new implementations raised in testing in compliance with FortisBC's CR's and operational standards which solidified reliability of the system and operations.
- Consolidated, analyzed and reported data for Fortis operations into statistical information for management to gain greater insight into productivity, goals, and processes as part of the IS Application Engineering and Operations team.
- Enhanced Fortis Technology Application SharePoint site utilizing Nintex and CSS to improve usability and meet objectives, creating seamless workflows and data application entry.

### Web Developer, Roasty Jack BC

Aug 2020 – Dec 2020

- Created a website using a combination of HTML and CSS tools to present and advertise the business, which allowed them to reach more potential customers and increase traffic by 40%.
- Implemented and maintained the website backend using MySQL, drupal767, and PHP to enhance functionality of the website in the future, such as checkout and profiles, providing more seamless and convenient transactions for both parties.
- Made the website live within 5 months with a team of 2 that helped fast-track their timeline on release, saving them costs while meeting their functional end-user requirements.

## 📁 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.

### 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 of the game by utilizing Unity to develop and test, resulting in the level being a key point in the story and the group finishing the challenge of creating a game within the time constraint of 3 days.

## 🎓 Education

### BSc - Computing Science, Simon Fraser University

Jan 2020 – present  
Burnaby, Canada

### Associate of Computer Science, Langara College

Sep 2018 – Dec 2019  
Vancouver, Canada