

# Andy Ren

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## EDUCATION

### Simon Fraser University

Burnaby, BC

BSc in Computer Science

Expected May 2025

- **Relevant Coursework:** Data Structures and Algorithms, Computer Systems, Software Engineering, Object Oriented Programming, Operating Systems, Database Systems, Computer Graphics, Artificial Intelligence, Technical Writing

## EXPERIENCE

### QE Home | Quilts ETC

Burnaby, BC

Software Developer Co-op(Full-stack)

May 2023 - Dec 2023

- Architected and implemented a robust backend authentication system using Python (Django), enhancing security and user management, and reducing unauthorized access incidents.
- Developed and integrated user-friendly frontend authentication components with JavaScript (React), reducing the login and registration time by 40% for over 100 current and future employees.
- Implemented a user-friendly password recovery feature, resulting in a 50% reduction in IT support tickets.
- Constructed an efficient purchase order creation system for the company's internal web application, optimizing the procurement process and improving workflow.
- Designed and implemented a calendar showcasing ETA dates for all Purchase Orders improving management efficiency.

## PROJECTS

### DDMap - Mobile App ([GitHub](#))

Feb 2024 - Present

GitHub Open-source Project

- Created an interactive map app using React Native and Expo to help delivery drivers work more efficiently.
- Developed key features such as location marking, user location display, login and register functionality, and a user-based rating system.
- Currently enhancing user engagement by implementing location sharing and a social posting feature, to encourage community interaction among users.

### Rush Hour Solver

Nov 2022 - Dec 2022

Data Structures and Programming - SFU

- Developed a C program to solve the "Rush Hour" mini-game puzzle, by clearing the path for the red car.
- Implemented the A\* algorithm for pathfinding due to its efficiency and speed.

### Run for the Bus - Video Game ([YouTube Video](#))

Oct 2021 - Dec 2021

Introduction to Software Engineering - SFU

- Collaborated in a team of four to develop a Java-based mini-game, "Run for the Bus," featuring dynamic gameplay and five unique levels.
- Designed and implemented an options menu for player customization, enhancing experience.
- Created a YouTube video showcasing the premise and gameplay mechanics.

### Game of Os ([GitHub](#))

Nov 2020

CSSS Fall Hackathon - SFU

- Collaborated with a team to create "Game of Os," a C++ cellular automaton simulator inspired by "The Game of Life" within an 8-hour timeframe.
- Conducted thorough unit testing and debugging using a designated test board, ensuring the game's reliability.

## SKILLS

- **Programming Languages:** Java, JavaScript, Python, HTML/CSS, C++, SQL
- **Frameworks & Libraries:** React/React Native, Django, Node.js, Bootstrap, TailwindUI
- **Developer Tools:** Visual Studio Code, IntelliJ, Git, FireBase, MySQL, Figma, Ubuntu