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# EDUCATION

#### The University of British Columbia

Vancouver, BC

Email: andyjli107@gmail.com

B.Sc., Combined Major Computer Science and Math; 4.10/4.33 GPA Expected Graduation: May 2026

• Coursework: software engineering, operating systems, computer networking, computer vision, linear algebra.

#### EXPERIENCE

## Software Engineer Intern

Vancouver, BC

Amazon Web Services, Inc.

May~2025

• Incoming Software Development Engineer Intern at AWS on the Relational Database Service team in Vancouver.

## Software QA Engineer Intern

Vancouver, BC

 $Incognito\ Software\ Systems$ 

Sept. 2024 - April 2025

- Developed over 100 automated tests in Java and Typescript with Playwright fixing over 70+ bugs.
- Wrote robust and automated API testing suites for our services in Java with Selenium.
- Scheduled and monitored recurring test runs in Jenkins, reducing the need for manual testing.

### Computer Science Teaching Assistant

Vancouver, BC

UBC Department of Computer Science

July 2024 - April 2025

- Undergraduate TA for CPSC 210: Software Construction, a second year OOP class in Java.
- Guided over 80 students with developing their term project by helping with program design and debugging.
- Answered questions and lead lecture activities of classes over 200+ in size.

# Software Developer

Vancouver, BC

UBC Game Development Club

Oct 2023 - Dec 2023

- Designed and implemented a movement and a tile management system in Godot using C# and GDscript.
- Boosted development process with UML diagrams, increasing efficiency by 25% and streamlining system structure.

# TECHNICAL PROJECTS

Blossom github | TypeScript, Python, SQL, React Native, Flask

- Developed a full stack mobile app for users to grow a garden through physical exercise.
- Utilized geo-fencing and geo-location tracking to effectively determine a user being inside/outside.
- Engineered an API to communicate with a SQL database to manage user's gardens and their friends list.

Anthill github | JavaScript, Mocha & Chai, React, Ollama API, Firebase Auth, Firestore, Docker,

- Created a website using agile and scrum workflow for users to improve code literacy by explaining functions.
- Utilized Firebase cloud services for password-less authentication and storage of attempts and emails.
- Integrated Ollama with the Deepseek Coder LLM to parse responses and generate code for grading.

Simplified TCP Server | C++, GDB, Make, Shell

- Developed a server with a TCP-like protocol with proper connection, disconnection, and in-order packet delivery.
- Utilized C++'s socket API to manage network communication effectively on different ports.
- Ensured robustness through testing with GDB and Shell scripts, with automated building using Make.

Image Compressor github | C++, Valgrind, GDB, CMake

- Wrote quad trees in C++ to create a lossless image compression software with low memory consumption.
- Engineered a tree pruning feature based on color similarity, reducing image size by over 20%.
- Implemented seamless image manipulation tools for rotating, flipping, and copying images.

## TECHNICAL SKILLS

Languages: Typescript, Java, C++, C, C#, Rust, Python, SQL, MATLAB.

Frameworks and Libraries: Flask, Express, React, React Native, JUnit, Playwright, Selenium.



