Allan Wang

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EDUCATION

Bachelor of Science, Combined Major in Computer Science and Statistics **Sept 2022 - May 2027**
University of British Columbia Vancouver, BC

- Cumulative GPA: **4.33/4.33**; two times Dean's Honour List; Trek Excellence Scholarship recipient.

TECHNICAL SKILLS

Languages: C, Swift, C++, JavaScript, TypeScript, Java, Python, SQL, R, HTML, CSS
Technologies: React.js, Node.js, Next.js, Git, PostgreSQL, JUnit, Java Swing, GDB, Python pandas, Spring Boot, RTOS, OpenThread API, SFML, Oracle Database, IoT, Express.js, Linux*,
Developer Tools: VS Code, Xcode, IntelliJ IDEA, CLion, Postman, Docker, nRF Connect, Vercel, Supabase, Vim

EXPERIENCES

Software Infotainment Platforms Engineer,
Rivian and Volkswagen Group Technologies. | *Vancouver, BC* **Sep 2025 – Present**

- Developed infotainment platform software for **performance KPI metrics** monitoring (GPU, DSP), enabling visualizations to analyze performance while running applications, improving workflow for optimizations.
- Designed and automated tests for the performance KPI monitoring program (GPU, DSP), increasing test coverage and ensuring consistent performance reporting across builds.
- Collaborated in an Agile team to deliver and review software features and progress in iterative sprints.

Software Engineer, LED Smart Inc. | *Surrey, BC* **Dec 2024 – Aug 2025**

- Designed and implemented embedded software on nRF54L15 using Zephyr RTOS and OpenThread in **C**; leveraged peripherals such as GPIO and UART to achieve control over LED states as a robust Thread network.
- Refined Thread device commissioning process by applying mutex locking and isolated a blocking function with **multithreading**, reducing main thread delay and improving system responsiveness during boot-up.
- Implemented and validated **networking protocols** using UDP with custom reliability mechanisms.
- Responded actively to QA testing feedback to advance the project from initial development to **beta release**.

Full-Stack Developer, UBC Cubing (Rubik's Cubes) Club | *Vancouver, BC* **Jan 2025 – Aug 2025**

- Designed, developed, deployed an interactive website for the UBC Cubing Club to be used for weekly meetings.
- Built an intuitive UI using **React.js** with file-based routing in **Next.js (TypeScript).** Created a custom timer with reliable submissions and enhanced UX using Cubing.js' scramble modeling, in response to beta testing **feedback**.
- Designed and managed a **PostgreSQL database** with Supabase, optimizing data storage for member profiles and meeting statistics; integrated **Supabase**'s user authentication API and matched users to members of the club.

Coding Instructor, Robokids Canada | *South Surrey, BC* **Aug 2024 – Nov 2024**

- Assisted students with **LeetCode-style Python & Java** questions; reviewed work of students and **tested** them for bugs and provided insights for optimization and improvements. Led camps and maintained safe environment.

PROJECTS

Pet Management System | Full Stack, JavaScript (React, Node, Express), SQL, Database **Jan 2025 – Apr 2025**

- Developed a web application using **React.js with JavaScript**, that allows users to perform **CRUD** operations on a pet shelter database enabled using **custom APIs** with structured routing.
- Designed, normalized, and implemented an Oracle Database schema to optimize data storage and efficiency.
- Built and executed dynamic **SQL queries** tailored to verified user inputs and displayed filtered query results.

Algorithm Visualizer | Swift, SwiftUI, Algorithms, iOS Development **Aug 2024 – Dec 2024**

- Developed an algorithm visualizer that solves mazes in the form of a **multi-view** iOS application.
- Rendered customizable mazes using **SwiftUI**; updated the maze upon user inputs with quick edit features.
- Implemented **BFS and DFS** to solve the maze designed by the user, rendered the solution as stepped animations.