

# Kunlong He

Coquitlam, BC V3J 0K6 | kha112@sfu.ca | 778-861-4397

 <https://github.com/mark2515>  <https://www.linkedin.com/in/mark-he-235573293>

## Education

### Simon Fraser University

May 2022 – May 2026 (Expected)

Bachelor of Applied Science (BASc), Major in Computer Science

Burnaby, BC

Computer Science Courses GPA: 3.5+

Coursework: Algorithms, Data Structures, Object-Oriented Programming, Design Patterns, Computer Systems, Data Analysis, Machine Learning, Calculus, Probability and Statistics, Discrete Mathematics, Linear Algebra, Linear Programming

## Work Experience

### AI Chatbot Developer Internship | Vue, TypeScript, Node.js, Docker, MySQL

Aug 2023 – Dec 2023

Fujian Zhimao Law Firm

Fujian, China

- Designed and developed advanced chatbots using the latest in Natural Language Processing (NLP) and AI technologies, including mainstream large language models (LLMs).
- Implemented NLP and automation frameworks to enhance user interactions and simplify client consultation processes, substantially boosting case handling efficiency at the law firm.
- Built user-friendly interfaces and integrating backend systems using Vue, Node.js, and REST APIs, leveraging Alibaba Cloud for database hosting to ensure scalability and efficiency

### Junior Frontend Developer | React, TypeScript, MUI, Jest, Storybook, Redux-toolkit

Aug 2021 – Nov 2021

Deloitte Digital

Shanghai · Remote

- Delivered over 20+ components, including 4 high-complexity components, forming the backbone of a widely utilized component library used by over 6,000 frontend developers and in more than 100 projects across Deloitte, enhancing developer productivity.
- Conducted comprehensive component testing using Jest to ensure code quality and robust functionality, achieving more than 96% coverage in all components which reduced bugs in production by nearly 50%.
- Implemented optimal approaches emphasizing reusability, accessibility, and modern UI standards, enabling developers to integrate components with minimal code and significantly reducing development time.

## Projects

### Battleship Board Game Project | React, JavaScript, HTML, CSS

Aug 2023

Team Developer (CMPT276 - Introduction to Software Engineering, SFU)

- Designed the user interface for the main page and organized several meetings with team members to discuss user experience and improvement plans, aiding the team in achieving full marks in the evaluation
- Developed an algorithm for the game AI to strategically execute shooting actions, reducing the average game length from 65 moves to approximately 48 moves (a 25% improvement in hit rate)
- Conducted multiple rounds of boundary-value testing, unit testing, and integration testing on the project; Discovered and resolved an out-of-bounds vulnerability related to the two-dimensional array

### Back-end Administration System | Vue, Spring Boot, MySQL

May 2023

Team Developer (leader)

- Responsible for the development of backend and database, while guiding the team's overall tasks and assisting in team communication to create a collaborative work environment
- Built a functional backend using Spring Boot, creating RESTful APIs for user management and retrieval

## Technical Skills

**Languages:** Java, Python, C/C++, JavaScript, HTML, CSS, MATLAB, R, Haskell, x86-64 Assembly

**Tech Stacks:** Spring Boot, React, MySQL, PostgreSQL, Redis, Spark

**Development Tools:** Linux, Git, Docker, AWS, CI/CD, Maven, Postman