Ryan (Jiajian) Cai

LOCATION: Sydney, NSW WEBSITE: https://www.linkedin.com/in/ryan-cai-aab38b227/

PROFILE

Full Stack Developer with 3+ years of hands-on experience building scalable web applications with a strong emphasis on React (70%) for front-end and Golang (30%) for backend development. Adept at building performant, maintainable, and user-friendly applications using modern technologies like TypeScript, Next.js, Redux, and AWS. Experienced in microservices, API design, DevOps practices, and clean architecture

SKILLS

Programming Languages: Golang, JavaScript, TypeScript, Python, Java, HTML, CSS, C, SQL, jQuery,

Frameworks: React, React Native, Node.js, Vue, Next.js, AWS Web Services, Flutter

Tools & libraries: Material UI, Bootstrap, Figma, Gin, Wire, Docker, StoryBook, PyTorch,

Operating System: MacOS, Windows, Linux

WORK EXPERIENCE

Alliance Climate Control (https://www.alliancecc.com.au/)

Full Stack Developer (React & Golang)

Jul 2022 - Mar 2024

- Built and maintained responsive and scalable web applications using React, TypeScript, and Next.js.
- Integrated and optimized RESTful APIs and GraphQL services.
- Developed backend microservices using Golang, implementing concurrency-safe design and efficient data flows.
- Worked with MySQL and PostgreSQL for data modeling and query optimization.
- Implemented CI/CD pipelines with GitLab and deployed services on AWS using Docker.
- Collaborated with UI/UX teams for pixel-perfect, accessible designs and delivered unit/UI tests using Jest and Cypress.

BCU World (https://www.bcu.world/)

Front End Developer Feb 2022 – Jul 2022

- Built the Front End system of web pages and mobile apps base on UX design
- Modified, maintained and optimized completed pages by following the requirements
- Built high quality, human-readable, well-documented and reusable code
- Cooperated with back-end developers to realize the docking of product interface and functions

AiCare Health (https://www.aicare.ai/)

Software Engineer Jan 2021– Dec 2021

- Developed app pages using CSS, JavaScript to match UI/UX design specification for complex layout
- Conducted thorough testing and debugging to identify and resolve issues, ensuring high-quality and reliable software
- Implemented various functions individually including voice chat, chatbot, message notification
- Came up with diverse problems and solutions for a coding chatbot
- Worked closely with designers and product managers to iterate on user feedback and continuously improve the mobile application

PROJECTS

Synflo – Internal Operations System

• **Project Description**: Developed an internal system for Alliance Climate Control designed to streamline operations across various departments. Features include call logging, order placement, and market data analysis.

• **Technologies Used**: Front end implemented with React and Next.js; back-end developed using Golang and MySQL. Hosted on AWS.

• Responsibilities:

- Architected and executed the Front End development of the platform, ensuring a responsive and intuitive user interface tailored to streamline operations across multiple departments.
 - Developed modular, reusable UI components, enhancing application scalability and maintainability.
 - Conducted comprehensive code optimizations to improve system performance and user experience.
 - Creation and maintenance of API endpoints, optimizing data retrieval and processing efficiency.

Aicare Health - Remote Medical Assistance App

- **Project Description**: Developed a remote medical assistance app in response to COVID-19, featuring separate interfaces for clients and doctors, primarily for online medical consultations. Additional functionalities include automated patient report generation, order placement, and instant messaging.
- **Technologies Used**: Utilized React Native & Expo for a responsive and cross-platform Front End, with a backend language of Java and framework of Spring Boot coupled with MySQL. Leveraged Firebase for backend database solutions and implemented OAuth for secure user authentication.

• Responsibilities:

- Directed full-scope development for the consumer interface, managing critical features like order operations and patient interaction.
- Integrated and fine-tuned Twilio-based video communication capabilities to enable effective online medical consultations.
- Enhanced system responsiveness and reduced load times through advanced techniques such as pagination, lazy loading, and caching strategies, significantly improving user experience and operational throughput.

ACHIEVEMENTS

- Developed an order system for logistics that significantly improved efficiency for the company's customer service department, reducing the average time for phone orders from 10 minutes to 3 minutes, significantly saving time and money.
- Utilized professional UI design to develop more attractive and practical websites, effectively increasing the page views and dwell time of the introduction page.
- Built a heat map system and various charts for data visualization, used Python to analyze the marketing data, effectively
 improving the company's marketing efficiency. It allows for customized services for different regions and customer
 service.

EDUCATION

University of New South Wales

Software Engineering (Honor Degree)

February 2018 - December 2021

- Graduated from the University of New South Wales majoring in Software Engineering. Awarded Distinction in overall score. And obtained high scores of HD in courses such as Front End programming, algorithm and programming technology, and artificial intelligence.
- Major courses: Front End Programming, Data Structures and Algorithms, Database Systems, System Modelling and Design, Computer Network, Artificial Intelligence, Machine Learning, Operating Systems, Neural Networks and Deep Learning.