

Zijun (Marshall) Zhang

- [Phone](#) - [Portfolio](#) - [Email](#) - [Linkedin](#) - [Github](#)

TECHNICAL SKILLS

Programming Languages: Python, TypeScript/JavaScript (ES6+), Java, C#, SQL

Frameworks & Libraries React, Next.js 14, Express.js, .NET, Tailwind CSS

Cloud & DevOps: AWS, Docker, Kubernetes, GitHub Actions, Terraform, CI/CD

Machine Learning & Data: PyTorch, Scikit-learn, HuggingFace Transformers, Retrieval-Augmented Generation (RAG), LangChain, Pandas, NumPy

Database System: PostgreSQL, MySQL, MongoDB, Redis

Practices & Tools: Git, Jira, Confluence, Agile/Scrum, Unit Testing

EDUCATION

The University of Melbourne

Master of Computer Science (WAM: H1)

Melbourne, Victoria, Australia

Mar 2024 - Dec 2025

The University of Melbourne

Bachelor of Science in Computing and Software Systems (WAM: H2A)

Melbourne, Victoria, Australia

Mar 2021 - Dec 2023

WORK EXPERIENCE

Software Engineer

Techman Launch Pty Ltd, Melbourne, Australia

May 2025 - Present

- Shipped 8+ full-stack features (React, .NET, AWS) that raised client Net Promoter Score from 7.6 to 8.7.
- Designed GitHub Actions and Docker CI/CD pipeline, cutting release cycle from 2 weeks to daily and reducing regression defects by 30%.
- Built Cypress end-to-end tests for the React front-end and xUnit integration tests for .NET APIs (200+ cases, 90% overall coverage), cutting manual QA effort by 50%.

Software Engineer intern

Industrial and Commercial Bank of China, Melbourne, Australia

Dec 2023 - Feb 2024

- Optimized SQL queries and integrated Redis caching, reducing average transaction latency by 20%.
- Redesigned the user interface with intuitive form design and real-time validation, reducing error rates by 15%.
- Coordinated cross-functional integration of new KYC microservice, meeting regulatory deadline 1 weeks early.

Data Engineering and Testing Intern

Alibaba, Yunnan, China

Dec 2022 - Feb 2023

- Developed an LSTM demand-forecast model improving safety-stock accuracy by 10%.
- Automated pipeline validation with Airflow and PyTest achieving 98% test coverage; prevented critical data outages.
- Led code reviews across 5 repositories, resolving 30+ critical issues and improving team coding standards.

PROJECTS

- **Interview Copilot**, a web-based application that enhances interview performance through real-time speech-to-text transcription and AI-powered assistance. Built with React, integrating Deepgram and OpenAI's GPT-4o APIs. Features low-latency audio streaming via WebSocket, advanced text processing, and a responsive, theme-able interface with secure API key storage. [GitHub](#)
- **Prompt Optimizer**, a web application that refines user prompts for LLMs (GPT-4o, Claude 3.5). Developed with Next.js 14 and Tailwind CSS, offering real-time prompt optimization by integrating OpenAI and Anthropic APIs, secure API key storage, and an intuitive interface with dark mode support. [GitHub](#)
- **Melbourne Urban Mobility Insights Dashboard**, an interactive R Shiny application analyzing Melbourne's pedestrian dynamics, public transport patterns, and road safety metrics. Implements custom CSS with libraries like shinyjs and shinydashboard for dynamic navigation and detailed modal dialogs. [GitHub](#)
- **Distributed Collaborative Whiteboard**, a Java-based program enabling real-time, multi-user drawing through a robust client-server architecture. Developed with Java Swing, it supports diverse drawing tools, text insertion, comprehensive file operations, and custom command handling for user management and canvas synchronization. [Github](#)

EXTRACURRICULAR ACTIVITIES

- **Committee Member** in International Society for Energy Transition Studies
- **Executive Member** in Computing and Information Systems Students Association