Wei Zheng

1999-07 | Male | 3 years experience
z1596761805@gmail.com

Education

Quanzhou Normal University - **Computer Science** - **Bachelor**   Sep 2020 - Jun 2022

Major Courses：**Oracle database management, Data Structure, Theory of Computer Composition, Web Programing, Python Programing, Computer Network Technology, Software Engineer, Basic Mathematics for Computer**

Liming Vocational University - **Architectural Engineering Technology** - **Diploma**   Sep 2017 - Jun 2020

Work Experience

Shanghai Tianmai Information Technology Co. Ltd. - **Java Development Engineer**   Aug 2024 - Feb 2025

- Participated in the development of in-house software systems, including requirements analysis, system design, database modeling, and API design based on business needs.
- Familiar with common design patterns and algorithms, as well as widely used distributed algorithms.
- Able to write technical documentation in accordance with company standards and specifications.
- Responsible for development tasks in various projects and consistently completed assignments on schedule.
- Demonstrated strong adaptability and self-motivation in dynamic development environments.

Hangzhou Xiaozhi IoT Technology Co. Ltd. - **Java Development Engineer**   Nov 2022 - Jul 2024

- Monitored system health and performance, and proactively optimized system efficiency.
- Assisted in resolving technical challenges and participated in system refactoring to ensure high performance and system stability.
- Designed scalable, high-performance, secure, and reliable technical architectures based on evolving business requirements.
- Developed backend modules for internet-based products and implemented effective technical solutions.
- Participated in requirements analysis and functional design, ensuring timely and high-quality delivery with a focus on performance and stability.

Shanghai Qianjiang Network Technology Co. Ltd. - **Java Development Engineer & Graduation Internship**

Feb 2022 - Nov 2022

- Assisted in developing web applications using the Spring Boot framework, gaining hands-on experience with RESTful API design and modular code development.
- Performed database design and optimization using MySQL, including writing complex SQL queries, designing relational schemas, and implementing indexing strategies to improve performance.
- Deployed and maintained Java-based applications on Linux environments, using basic shell scripting and system commands to monitor logs and manage server processes.
- Collaborated with senior developers to troubleshoot bugs and optimize backend logic, while participating in code reviews and learning industry-standard development workflows.

Project experience

HeJiaQin Mobile Application (China Mobile Smart Home Platform) － Java Developer

Tech Stack: Spring Boot, Spring Cloud, Maven, Git, MyBatis, Redis, Nginx, MySQL, Linux, Kafka, Zookeeper, Caffeine
HeJiaQin is a companion mobile application for China Mobile's Smart Home Gateway. It enables users to manage their home network, control smart devices, access mobile services, and use daily life services, greatly enhancing the smart home experience.

Key Responsibilities and Achievements:

- Configured and managed multiple Kafka data sources to support complex message-driven architectures.
- Refactored device binding and sharing logic to improve data consistency and user experience.
- Migrated alerting mechanisms from synchronous to asynchronous communication using Kafka, and implemented a randomized algorithm to smooth traffic spikes dynamically.
- Developed a dynamic configuration update mechanism using Zookeeper listeners to ensure real-time consistency between local cache and MySQL.
- Enhanced query performance by integrating Caffeine caching with a batched data preloading strategy, ensuring data consistency under high concurrency.

HuiJiaKaiMen Smart Lock Application － Java Developer

Tech Stack: Spring Boot, Spring Cloud, MyBatis, MySQL, FreeSWITCH (ESL), SkyWalking, Fastjson, Git
HuiJiaKaiMen is a mobile application developed by Wanjiaan IoT Technology Co., Ltd., designed for remote smart lock management. It supports real-time access control, video monitoring, abnormal activity alerts, and remote device operations, enhancing smart home security and user convenience.

Key Responsibilities and Technical Highlights:

- Resolved transaction consistency issues in asynchronous operations using a main-thread status marker strategy.
- Developed SIP-based call functionality through FreeSWITCH integration.
- Implemented device authentication, call authorization, balance inquiry, and order creation in coordination with legacy landline systems via FreeSWITCH.
- Utilized FreeSWITCH event listener mechanisms to accurately manage key call events such as answer, hang-up, and bridging.
- Employed ConcurrentHashMap to transmit and manage call duration data within asynchronous processing threads.
- Designed and deployed an active-standby FreeSWITCH server architecture to improve system availability and fault tolerance.

Home Feature Security Analysis Platform － Java Developer

Tech Stack: Spring Boot, Spring Cloud, Nacos, Kafka, Redis, Elasticsearch, Caffeine, Maven, Git
This project aimed to enhance real-time family safety services by transforming previously offline AI modules into an online architecture. Through real-time alarm processing and hybrid online-offline coordination, the platform enabled in-depth analysis across all networked devices, improving both system responsiveness and maintainability.

Key Responsibilities and Technical Contributions:

- Implemented a caching layer for efficient retrieval of device information, reducing database load and improving system responsiveness.
- Designed and integrated a gray routing and throttling framework to manage high-traffic regions and prevent service degradation.
- Developed real-time alarm analysis features for both legacy (v1.0) and new-generation (v2.0) smart home devices.
- Solved delayed image retrieval in v1.0 devices using a dual-thread pool mechanism for concurrent processing.
- Designed and implemented a dynamic indexing strategy for Elasticsearch, supporting asynchronous callbacks from the AI inference platform and tagging results with high efficiency.

OALinkUp - **Java Developer**

Tech Stack: Spring Boot, MyBatis-Plus, Spring Security, MySQL, JWT, Logback

OALinkUp is an audio and video conferencing platform designed to support high-definition communication, screen sharing, and real-time messaging. The project involved developing secure and scalable backend services for user management and system integration.

Key Responsibilities and Technical Contributions:

- Implemented dynamic service control via feature toggles to manage upstream and downstream service calls.
- Developed core user features including registration, login, profile updates, and account information retrieval.
- Established a robust exception handling mechanism and utilized Slf4j with Logback for structured logging and issue tracking.
- Built a stateless authentication system using JWT, and applied Spring Security to enforce role-based access control over API endpoints.
- Collaborated with cross-functional teams to deliver integrated services for account management, ensuring consistency across modules.

Professional Skills

Programming Languages

- Strong foundation in **Java**, with clean, maintainable, and scalable coding practices.
- Working knowledge of **HTML**, **CSS**, and **JavaScript** for front-end integration and full-stack collaboration.

Frameworks & Tools

- Proficient in **Spring Boot** and **Spring Cloud** for building microservices architectures, including service registration, configuration, and inter-service communication.
- Experienced with **MyBatis** / **MyBatis-Plus** for ORM and SQL mapping.
- Familiar with **Kafka**, **Zookeeper**, and **Nacos** for distributed messaging and configuration management.
- Version control with **Git**; collaborative development using **Maven** and **CI/CD pipelines**.

Database & Caching

- Skilled in **MySQL** schema design, indexing strategies, and query optimization.
- Hands-on experience with **Redis** for caching, distributed locking, and handling issues like cache penetration and double-write consistency.

DevOps & Deployment

- Comfortable in **Linux** environments, including shell scripting and server configuration.
- Familiar with **Docker** for containerization and deployment.
- Exposure to **Skywalking**, **Logback**, and **Prometheus** for system monitoring and performance tuning.

Language Skills

- Native in Mandarin Chinese
- Proficient in English, with a PTE Academic overall score: 61 (Speaking 54, Writing 74, Listening 61, Reading 63)