

Richard Yang

Senior Java Developer | 8 Years Experience | ✉ yangzhichao1125@gmail.com

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Summary

8 years of experience in backend development, 3 years of experience leading a small team at Tencent.

Fluent in English for daily work scenarios, enabling smooth collaboration with international teams.

Spearheaded the end-to-end development of a SaaS-based HR management platform serving 20k+ enterprise tenants and 5M+ DAU, achieving a peak QPS of 2k+ through distributed architecture optimization.

Conducted in-depth research on concurrency, network programming, distributed technology selection, MySQL, Redis, Dubbo, Kafka, JVM tuning, Spring extension development and other technologies.

Skills

Master the implementation details of common classes in JDK collections and JUC concurrent packages.

Master the underlying workings of transactions, isolation, MVCC, index, and log of the MySQL InnoDB engine.

Master the principle of Redis, understanding its design thinking, and able to use Redis to solve practical problems, such as rate limiting, high concurrency stock deduction.

Master the principles of code execution in the JVM, GC mechanism, good at performance tuning through MAT, JProfiler.

Master the common data structures and algorithm design.

In-depth understanding of MQ middleware, expertise in handling message loss/duplication in MQ systems.

Read the source code of spring and Spring Cloud Netflix related components, like Eureka, Ribbon, Feign, Hystrix, etc. Able to develop Spring extensions.

Work Experience

Tencent

2021 - 2024

Technical Project Manager

- Provided technical leadership to 10+ developers on the team via code reviews and mentoring.
- Approved architectural decisions for 5 application developments and designed solutions to ensure the scalability and reliability of systems.
- Managed Quality Assurance, User Experience Designers, and 10+ other cross-functional teams, ensuring that requirements were well understood.
- Supervised a team of over 10 developers who created an app. This app attracted 100,000 users within 72 hours of its release.

Pupu E-Commerce

2020 - 2021

Java Developer

- Refactored the application's data layer, slashing response times by 50%.
- Initiated daily code reviews, boosting app efficiency by 20% and cutting bug density by 25%.
- Automated repetitive manual tasks in legacy systems with Java, reducing process times by 15%.

Junior Java Developer

- Assisted in maintaining legacy systems using Java SE, increasing system stability by 20%.
- Helped refactor inefficient code, reducing processing time by 15%.
- Participated in the implementation of scalable algorithms, helping improve execution speed by 10%.

Key Projects

Tencent HR Management

2021 - 2024

Tech Stack: Spring Cloud + Spring Boot + TDMQ + Redis + MySQL + ELK

- **Technology Selection:** Responsible for designing the data isolation scheme for the SaaS system and the dynamic routing scheme for the gateway with over ten thousand tenants.
- **Core Module Development:** Developed core business modules such as employee management, employee social security, and attendance management.
- **Performance Optimization:** Analyzed and resolved online issues, optimized system performance, and improved the upload and download functionality for millions of records.
- **Project Management and Coordination:** Served as the **Technical PM**, managing overall project progress and resource allocation, coordinating the work of technical team members.
- **Achievements:** This project is a SaaS product, currently with **20,000+** tenants and **5 million+** users, with a maximum QPS exceeding **2000**.

Pupu Supermarket App

2020 - 2021

Tech Stack: Dubbo + Spring Boot + Redis + MySQL + Kafka + Elasticsearch

- Owned end-to-end supply chain module development with 200+ APIs, mainly focusing on the supply chain module.
- For modules like orders, coupons, and points with large data volumes, ShardingSphere-JDBC was used for database sharding.
- Provided online support, on-site deployment, log analysis, and optimized slow SQL indexes.

Andon System

2017 - 2020

Tech Stack: Dubbo + Spring Boot + SpringMVC + MyBatis + HANA + Redis + RabbitMQ

- Database Design: Sharded databases based on business ID for vertical partitioning and monthly horizontal partitioning;
- Multi-level Caching: Redis caches message data and applies hotspot models, caching hot data to optimize query performance;
- Asynchronous Decoupling: Used RabbitMQ message queues to receive messages from the MES, concurrently writing to the HANA database;

Education