

# Richard Yang

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Senior Java Developer | 8 Years Experience | ✉ [yangzhichao1125@gmail.com](mailto:yangzhichao1125@gmail.com)

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## Summary

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- 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

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- 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

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### 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%.

# CATL

2017 - 2020

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

- Designed database sharding for high-traffic modules (orders, coupons, points) using ShardingSphere-JDBC. The solution effectively handled over 800 TPS during peak hours.
- Implemented a Redis Cluster to cache high-frequency queries on slow-changing data, resulting in a 50% reduction in MySQL CPU utilization and a 30% faster API response time, dropping from an average of 450ms to 150ms.
- Conducted production optimization, including tuning slow SQL indexes to eliminate 65% of full-table scans and performing ELK-based log analysis for fault troubleshooting.

## Education

Minjiang University	Bachelor	Science in Electrical Engineering	2013 - 2017
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