Ryan Zheng – JAVA 2 years, CS master

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SUMMARY

Solid Java Foundation: Solid foundation in **Java** core knowledge. Proficient in collections and **SDLC**. Strong object-oriented programming mindset**.**

Java Multithreading: Proficient in **multithreading**, thread pools, **AQS**, **CAS**, and **ThreadLocal**.

Main Frameworks: Proficient in **SpringBoot**, **SpringMVC**, **Hibernate** and **MyBatis/Plus**.

Database Expertise: Skilled in using **MySQL**, **Redis**, **MongoDB**, **Elasticsearch**, **AWS S3**, **AWS RDS**, **Firebase**, **MinIO** as well as other databases, with expertise in transactions, locks, indexing, query optimization.

Microservices: Proficient in service registration and discovery, configuration center, rate limiting, circuit breaking, gateway routing and distributed transaction models, including TCC, AT and XA patterns. (**Eureka, Nacos, OpenFeign, SpringCloudGateway, Resilience4j, Sentinel, Seata**)

Distributed Problem-Solving Skills: Familiar with solutions to common distributed issues such as distributed locks, distributed sessions, and distributed task scheduling.(**Redisson**, **xxl-job**)

DevOps & System Tools: Proficient in **Linux** systems, **Docker**, **Nginx** and using **Jenkins** to implement CI/CD pipelines and automatically deploy applications to remote host's Docker container.

Middleware Expertise:

- Skilled in **RabbitMQ** and **Kafka**, asynchronous communication, delayed messages, message reliability, and duplicate message consumption solutions.

- Skilled in **Flink**, **FlinkCDC** to achieve data synchronization consistency.

- Proficient in using the **ELK** stack (**Elasticsearch**, **Logstash**, and **Kibana**) for log collection and analysis.

Version Control and Task Management: Used **GIT** for source control and **JIRA** for task management.

Third-Party Service Integration: Skilled in implementing SMS services, email services, and map services.

Frontend Technologies: Familiar with **HTML**, **CSS**, **JavaScript**, **TypeScript**, **jQuery**, **React.js**, **Angular**, and other front-end development technologies.

Angular: Rich practice with **Angular** 2+, specifically in using **TypeScript** to create Directives, Components, Services, Modules, Observables, Reactive/Template driven forms, Router, Route Guards, and Interceptor.

React: Profound knowledge in developing SPAs with **React** using libraries such as Axios, Redux, and React Router. Strong experience in React TSX, State, Props, and Life Cycle Methods.

AI Technology: Proficient in training and deploying LLM in Natural Language Processing (**NLP**) and Computer Vision (**CV**)

TECHNICAL SKILLS

Languages	Java 8/17, JavaScript, TypeScript, Python, C/C++
Server-Side Technologies	Spring Boot, Spring MVC, Hibernate, Spring AOP, JDBC, XML, Servlet, JSP, FreeMarker, SOAP, Tomcat, Flask
Web Development	Angular, React.js, HTML, CSS, JS, TS, Bootstrap, jQuery, Redux
Database	MySQL, MS-SQL, Redis, MongoDB, Elasticsearch, Firebase, MinIO, DDL/DML, HQL, DSL
Testing	JUnit, Postman, Mockito, Jmeter, ApiFox, Yapi, Swagger
Tools	Git, Linux, Docker, Nginx, Jenkins, Maven, Visual Studio Code, IntelliJ, Virtual Box, VMware
Web Services	AWS, EC2, S3, RDS
Messaging	RabbitMQ, Kafka
Spring Cloud	Eureka, Nacos, OpenFeign, Gateway, Configuration Center
Spring Security	JWT, OAuth2
Others	Resilience4j, Flink, Elasticsearch, Logstash, Kibana, Sentinel, Seata, xxl-job, POI, Jira

WORKING EXPERIENCE

Software Engineer   06/2020 – 02/2022

Weiye Holdings (HK.1570)   *Shenzhen, China*

Online Shopping Application   01/2021 – 02/2022

Xingsheng mall is based on community stores, adopting a "platform pre-sale + user self-pickup" model to address users' daily essential needs. It provides group-buying categories such as grains, oils, condiments, vegetables, fruits, apparel, home textiles, digital appliances, and more.

Include: Search services, product services, order services, payment services, user services, supplier management services, warehouse services, logistics services, customer communication services, in-site messaging services, statistics services, and marketing services, among others.

Technology Stack: SpringCloud, Sentinel, Gateway, Skywalking, SpringBoot, Hibernate, Redis, RabbitMQ, Kafka, XXL-JOB, MySQL, MinIO, Canal, ShardingSphere, Kubernetes, Docker, Harbor, Helm, ELK, Prometheus, Grafana

Responsibilities:

• Responsible for the development of processes related to points management, product management, order management, and shopping cart management within the marketing microservice.

- Resolved production issues reported by business development and testing feedback and collaborated with the testing team to complete functional testing.

- Completed the writing of API documentation and prepared detailed design documents for each back-end API in accordance with company standards.

Technical Description:

- Designed an authentication service using Spring Security, supporting login via username-password, mobile verification code, and integration with OAuth2.

- Implemented full-text search using Elasticsearch, designing indices for orders, mall products, channel products, and lead information, and built an ELK log platform to aggregate and retrieve logs of microservices.

- Used Kafka to handle non-strong-consistency function to smooth traffic peaks.

- Designed a product popularity calculation process using both scheduled and real-time computation:

    - Scheduled computation: Used XXL-JOB to perform daily calculations at midnight based on user behavior data and stored popular products in Redis for different categories to enhance user experience.

    - Real-time computation: Used Kafka Stream to compute real-time popularity data and update Redis and Elasticsearch for trending product searches.

- Designed appropriate rate-limiting rules, including Sentinel for microservice rate limiting and Redis-based user behavior rate limiting.

- Used WebSocket to enable real-time conversations between consumers and customer service.

- Used Apache POI to export merchant data into Excel files.

News Application   06/2020 – 01/2021

Jianzheng News aims to provide global readers with fresh, trending, in-depth, and entertaining political news.
It offers timely and objective international current affairs reports, covering events in Europe, the United States, and Hong Kong and Taiwan regions, delivering professional and original news content to readers.
This project has been launched and is undergoing a long-term iterative upgrade process. It uses a microservice architecture with a front-end and back-end separation design.

Technology Stack: SpringCloud, SpringBoot, Hibernate, Redis, Kafka, RabbitMQ, MongoDB, XXL-JOB, SpringCloud Service, ELK, Kubernetes, Jenkins CI/CD, GitLab, Docker, JIRA, Git, ApiFox, JMeter, Maven, Yapi, UniApp, Hadoop, Hive, Kafka, HBase, Flink, Azkaban, Python web crawlers.

Responsibilities:

- Participated in the entire project development process from scratch, including requirement discussions, database model design, technology selection, coding development, and writing API documentation.

- Took primary responsibility for the business development of microservices related to the Media Asset Module, Content Module, and User Center Module.

- Implemented monthly requirements and completed tasks assigned by the team lead.

- Ensured the quality of project code by repeatedly communicating with testing colleagues to discuss test cases, and prepared for interface testing, mock testing, and end-to-end stress testing, ensuring no major bugs after production deployment.

Technical Description:

- Used MongoDB for comments, in-site messages storage, to reduce traditional database load.

- Used the Freemarker and MinIO for hot page staticization.

- Built a distributed file storage cluster using MinIO to store images, videos, audio, and other project resources.

- Implemented OCR technology (tess4j) to recognize text in images and input the extracted text.

- Used RabbitMQ to implement delay queue functionality and decouple workflows.

- Used Flink to Sync MySQL and Elasticsearch. Introduced analyzers for improved tokenization in search queries.

- Used Jenkins to implement CI/CD pipelines and automatically deploy applications to remote host.

Software Engineer Internship   07/2019 – 11/2019

Sino-Ocean Group (HK.3377)   *Shenzhen, China*

House Viewing Reservation Website   07/2019 – 11/2019

Project Description: The company established its own housing management brand to reduce reliance on external platforms, align with physical stores, and adapt to market changes. It developed a housing transaction management system offering end-to-end services for renting, buying, second-hand housing, and office/shop transactions.
Supports property browsing, viewing, searching, and seamless contract signing.

Technology Stack: SpringCloud, SpringBoot, Oracle, Mybatis, Redis, RabbitMQ, Xxl-job, Jenkins

Technical Description:

- Designed and developed the lottery business system and used Redis for rate limiting to prevent a user from spamming the lottery interface.

- Implemented distributed locking with Redis in the lottery process to prevent overselling scenarios.

- Used Redis to cache anti-duplication tokens when submitting lottery confirmation requests, ensuring the idempotency of the lottery interface.

- Utilized RabbitMQ to synchronize lottery results with the order system for subsequent business processing.
- Continuously optimized other interface queries, including SQL optimization and restructuring of business code.

EDUCATION

Syracuse University	GPA:3.8/4	- *Master of Computer Science*	Sep.2022 - May.2024
Harbin institution of technology	GPA:3.3/4	- *Bachelor of Engineering*	Sep.2016 - Jun.2020