

Personal Information

Name: Zhu Yinghu

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Graduation: Xidian University

Graduation date: 2002-07

Major: Computer Science and Technology

Degree: Bachelor

Professional Summary

- Proficient in Java and mainstream microservice technology stacks, with solid coding skills and in-depth participation in core business development and optimization.
- Skilled in e-commerce platform architecture design, with experience in high-concurrency, distributed, and microservice architectures, successfully supporting 10+ million of PV and over 70,000 daily orders, with system availability of 99.99%.
- Extensive experience in middleware basic component development, leading the development of multiple middleware basic components (gRPC integration, database access, service discovery, caching, MQ, etc.), reducing development costs and improving development efficiency by 50%.
- Led multiple e-commerce platform architecture refactoring efforts, improving system stability and scalability.
- Skilled in DevOps practices, promoting CI/CD, gray release, database optimization, and monitoring system construction, improving automated operations and increasing release efficiency by 80%.
- Excellent cross-team collaboration skills, promoting architecture implementation and improving development efficiency and system stability.

Technical Skills

- **Architecture Design:** Microservice Architecture, Distributed Systems, System Refactoring, High-Concurrency System Design, data consistency assurance, multi-datacenter deploy
- **Development Technologies:** Java, Spring Cloud/Boot, JVM optimization, gRPC, Python, SQL optimization
- **Data Storage:** MySQL, Redis , MongoDB, Memcached
- **Middleware:** Consul, ELK, RabbitMQ, Dubbo, ShardingSphere, Canal, Distributed Job
- **Engineering Practices:** Gray Release Strategy, CI/CD pipelines, Monitoring & Alerting Strategy
- **Infrastructure:** Kubernetes, Prometheus, Jaeger, Docker
- **AI Developer Tool:** Cursor, Github Copilot, Claude, ChatGPT, etc ...

Work Experience

2024/02 — Present Freelancer

- Design a biometric payment solution
- Designed and implemented a high-performance data collection system
- Provide technical support for cross-border e-commerce enterprises

2019/03 —2024/01 LitblnTheBox Architect

- Led the construction and evolution of the company's basic architecture system, formulated and promoted unified technical specifications and best practices, standardized the technology stack, improved development efficiency by 40%, and ensured system consistency; designed and developed basic components and middleware suitable for the company's business scenarios, including: gRPC component, service discovery component, cache access component, MQ access component, database access component, distributed scheduling system, monitoring and alerting component; thereby improving development efficiency by 40%.
- Established a monitoring and alerting system based on Prometheus, Grafana, and WeCom (Enterprise WeChat), shortening fault response time to within 5 minutes, and improving system stability to 99.99%.
- Promoted the implementation and adoption of DevOps processes, integrated CI/CD and containerization technology, increasing release frequency to twice a week with a deployment success rate of 95%.
- Under the premise of ensuring the normal operation of e-commerce business and meeting the demands of major promotion scenarios, led the smooth transition of the middle platform system from a monolithic application to microservices, responsible for architecture design, service division, database splitting, etc., as well as project scheduling and full lifecycle management of system launches, successfully supporting a daily average of 10+ million of millions of PV and 70,000+ orders per day, with system availability of 99.99%. Simultaneously shortened the new feature launch cycle by 40%, providing a solid technical foundation for rapid business iteration.
- Responsible for daily system maintenance of the middle platform, promptly handling various system alerts and coordinating teams to quickly resolve issues; system SLA achievement rate increased to 99.97%.
- Architect's daily work: including recruitment, design reviews, and code reviews, reducing code defect rate by 50%.

2018/04 —2019/03 Mgzf Architect

- Led the service-oriented refactoring of the user-end system and built an RPC framework based on Dubbo, stably supporting 200 million RPC calls per day, significantly improving development efficiency and system stability
- Established a monitoring and alerting system based on Prometheus and Grafana

2016/04 — 2018/04 YHD Architect

- Responsible for the architecture optimization of commodity and order services, supporting 800 million calls per day and peak stability of 10,000 orders per minute.

2015/05 -- 2016/03 Adchina Senior Software Engineer

- As Scrum Master, promoted the Damojing Reportservice project, implementing a unified access interface for cross-data sources.

2012/10 -- 2015/5 MeiHuichina Senior Software Engineer

- Responsible for the architecture optimization of the intelligent transportation system, introduced Redis caching, optimized algorithms, supporting real-time calculation of 1.8 million data points.
- Built a data computing platform: introduced Hadoop to complete large-scale data cleaning and calculation, as well as algorithm optimization.

2006/10 -- 2012/09 Deepdyve Software Engineer

2005/8 -- 2006/08 Ndd Software Engineer

2002/07 -- 2005/07 Xi'anBeili Software Engineer

Project Experience

Project Name: Biometric-Based Payment Product Solution Design

Project Period: 2025/02 - 2025/04

Project Description: Led the design of an innovative biometric-based payment product solution (e.g., palm vein scanning). This solution aims to provide a phone-less, convenient, and secure payment experience, integrating payment APIs and biometric capture technology to offer users and merchants new payment and collection methods.

Main Responsibility: Conducted detailed product solution design and technical architecture planning, thoroughly considering user experience, security, system performance, and future scalability. Responsible for initial project planning, including developing project plans, and participating in preliminary budget considerations.

Project Name: Junlai Data Collection System

Project Period: 2024/05 - 2024/12

Related Technologies: Linux, Java, MySql, Redis, Tdengine

Project Description: The Junlai data processing system needs to connect to various data sources. To improve development efficiency, a unified data collector was needed.

Main Responsibility: Designed and implemented a high-performance data collection system, supporting data collection from various sources including databases, HTTP, FTP, MQTT, and Socket, ensuring system compatibility and flexibility. Achieved a single machine performance of 800 tps

Project Name: LitbInTheBox Infrastructure Establishment

Company: LitbInTheBox

Project Period: 2019/03 -- 2024/01

Technologies: Linux,Java,SpringCloud,gRPC,MySql,Redis,Rabbitmq,Jaeger, Prometheus, Kubernetes

Project Description: Before this, the company lacked a unified technical framework, with different teams using various technology stacks. For example, gRPC and Hession coexisted as RPC protocols,

and both ActiveMQ and RabbitMQ were used as message queues, lacking a unified standard. Technical protocols and agreements relied solely on documentation and verbal communication, leading to low development efficiency and poor system stability.

Main Responsibility: Built and evolved the company's core architecture system, unified technical specifications, as a core developer, completed RPC components, database access components, service discovery components, cache access components, and MQ access components; this reduced system development costs while improving development efficiency and enhancing system stability, and ensured the effective implementation of development standards.

Additionally, implemented a unified monitoring and alerting solution, ensuring a response time within 5 minutes even for faults occurring at midnight.

Project Name: LitbInTheBox Technical Middle Platform Architecture Work

Company: LitbInTheBox

Project Period: 2019/03 — 2024/01

Technologies: Linux, Java, Springcloud, gRPC, MySQL, Redis, Rabbitmq, Jaeger, Prometheus

Project Description: Technical middle platform is the core of the e-commerce system, including subsystems like product, order, payment and User Tag System. It provides various shared services and functionalities to support the stable operation and continuous development of the entire e-commerce system, thereby improving system efficiency and flexibility.

Main Responsibility: Led multiple system architecture refactoring efforts, including the transition from a monolithic application to microservice architecture. As well as the refactoring of the order, payment, and user systems, ultimately increasing payment success rate by 5%. Database splitting, making business databases independent and archiving historical data, improving database performance by 30%.

Migrated Session and data caches, significantly improving system stability, especially in Failover and scaling, achieving seamless operation and greatly enhancing system availability. My responsibilities included solution formulation, system design, launch process planning. Also, routine work such as technical recruitment, member technical guidance, technology selection, Code Review, SQL review, and online system support, etc.

Project Name: Rebuild MicroService

Company: Mgzf

Project Period: 2018/04 — 2019/03

Technologies: Linux, Java, Springboot, MySQL, Redis, Kafka, Dubbo, Zipkin, Prometheus

Project Description: Before the rebuild, the system was running as a single application, characterized by high complexity, poor scalability, and reliability, and low development efficiency, unsuitable for the rapid iteration characteristics of the internet.

Main Responsibility: Built a company-appropriate RPC framework based on Dubbo; led the entire project's rebuild, including technology selection, plan formulation, system design, and promoting the business team's migration to the new technical system, ultimately stably supporting 200 million RPC calls per day. And, established a monitoring and alerting system based on Prometheus and Grafana

Project Name: Architecture Work for Product and Order Teams

Company: YHD

Project Period: 2016/4 -- 2018/04

Technologies: Linux, Java, Spring, MySql, Oracle, Redis, MQ, RPC

Project Description: The product service, as a basic service of YHD, provides product, category, supplier, and other information to all services of YHD, offering product-related interface services; the order service, as the core service of YHD's transaction process, provides interface services related to order splitting, order completion, shipping costs, etc.

Main Responsibility: Daily architecture work for the team, including technical recruitment, member technical guidance, technology selection, Code Review, SQL review, online system maintenance, etc., performance optimization, and some development work, ensuring 800 million/day calls for the product service and the reliability and stability of the order system at peak times of 10,000 orders per minute.

Project Name: Damo Reportservice

Company: Adchina

Project Period: 2015/7 -- 2016/3

Technologies: Linux, MySql, ODPS, OpenSearch, HSF, Garuda, Java, Scalar

Project Description: Damo Mirror is a data product provided by Alibaba Mama to help advertisers study consumers and promote new products; Reportservice mainly unifies multiple data sources (Mysql, Garuda, ODPS, etc.) to provide a unified access interface for client components; it can automatically generate corresponding Java Beans, Java Interfaces, and basic Java implementation files based on the client's configuration, transparently completing cross-data source join operations, allowing client components to focus solely on their core business logic.

Main Responsibility: As a scrum master, responsible for driving project progress, controlling quality, and related development work.

Project Name: Intelligent Transportation Real-Time System

Company: Meihuichina

Project Period: 2012/11 -- 2015/5

Technologies: Linux, Oracle, JBoss, JMS, Java, Zookeeper, Redis, Python, Hadoop, HBase

Project Description: The system real-timely accesses GPS data and mobile signal data, performs related calculations based on traffic algorithms, and outputs traffic status for Web, mobile app display, and open API data provision to third parties.

Main Responsibility: Architectural adjustment, separation of computing and publishing systems, facilitating the publishing system to support connections with multiple computing systems; introduction of Redis as a data cache to reduce database pressure; optimization of the computing system's algorithms to ensure completion of calculations for 1.8 million mobile signal and GPS data within 1 minute, and mapping of 150,000 traffic status points.

Education

1998/09 -- 2002/07: Xidian University, Computer Science and Technology