

WEILAI WANG

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🌐 <https://github.com/miku-wwl> in weilai-wang

👤 PROFESSIONAL PROFILE

- 4+ years of software engineering experience, Focus on high-performance distributed systems and microservice architecture. Proven expertise in Java/Spring Boot ecosystem, with hands-on experience in React/TypeScript.
- Proficient in Docker&Kubernetes, familiar with CI/CD pipelines. Have K8s cluster management experience, familiar with service mesh (Istio), and Helm/Kustomize.
- Proficient in Kafka, Aeron(sub-millisecond, high throughput and low latency fin-tech messaging middleware), familiar with gRpc and Thrift.
- familiar with AWS stack.
- Skilled in using JVM diagnostic tools such as Arthas and jcmd, and quickly locate distributed system failures by combining tcpdump/Wireshark and distributed trace tools (jaeger).

🎓 EDUCATION BACKGROUND

University of Technology Sydney 07.2020 – 08.2021
Master's Degree: Software Systems Engineering

University of Technology Sydney 07.2019 – 07.2020
Honors 'Degree': First-Class Honors of Science (Information Technology)

Nanjing University of Aeronautics and Astronautics 09.2016 – 10.2020
Bachelor's Degree: Software Engineering

⚙️ SKILLS

- Language: Java, JavascriptTypescript, Node.js, Golang.
- Framework: Spring Boot, Spring Cloud, React, Service Mesh (Istio).
- Cloud: AWS, Docker&Kubernetes, Helm/Kustomize, service mesh (Istio).
- MiddlewareDevelopment tech: Kafka, Aeron, Disruptor, Mysql, Postgresql, redis, Maven, Prometheus/Loki/Jaeger.
- Proficient English skills: PTE(2025) Listening 64, Speaking 54, Reading 74, Writing 75.
- Certifications: CKAD (Certified Kubernetes Application Developer) and AWS DVA (AWS Certified Developer- Associate).

👛 WORK EXPERIENCE

Huawei Technologies Co., Ltd. - Cluster Computing Network Development Department - 11.2021 - Present

High-performance microservice architecture design and high-quality delivery of large-scale requirements

- Led a team of 5 engineers to design and implement core microservice clusters to support the configuration and monitoring requirements of thousand-level device access, ensuring the efficient delivery of 300+ complex story requirements in traffic shaping/congestion scheduling/host security/device port management, and controllable defect rates.
- Spring Boot + Kubernetes is used to build a containerized microservice cluster to achieve automatic service scaling and load balancing.
- Define cross-service communication interface specifications through Thrift IDC to synchronize data between Thrift services and in-memory databases.

- Use static code scanning tools to identify and fix 150+ potential code defects before they occur; Lead the analysis and resolution of 300+ problem tickets.

Agile development team whole-process management and requirements delivery

- Multi-version parallel development, frequent iteration of requirements.
- Lead daily stand-ups, use project management tools, manage requirements progress, review and review.
- LCN switching software version 1.0 and 1.1 were successfully delivered.

OKX (Formerly OKEX) - 7.2021 - 10.2021

- Practiced using Aeron Archive to provide message storage and replay functions for the matching engine, used for auditing and fault detection, and pushed matching results to the market data push service.
- During the internship, understood the Spring Cloud framework, mastered basic Java development, Maven build, and distributed microservice problem debugging capabilities.

PROJECT EXPERIENCE

Exchange Matching System

Technical Stack: Spring Boot, Cloud Native/Kubernetes, Aeron Cluster, Aeron MDC, Vert.x, Disruptor, Simple Binary Encoding, RocketMQ

Address: https://github.com/miku-wwl/we_matching

- Development of a Financial Exchange Matching System Based on simple Open Source project.
- Removed the frontend Vue module.
- Refactored counter, gateway, sequencer, and matching modules using Spring Boot.
- Refactored MyBatis with Spring Data JPA.
- Containerized and deployed counter, gateway, and sequencer modules with Kubernetes.–In plan
- Refactored Vert.x multicast with Aeron MDC and built a highly available and high-throughput matching cluster with Aeron Cluster replicated state machines.–In plan
- Refactored Vert.x-MQTT market data push service with RocketMQ.–In plan

AWS-MS-Multi-Store-Backend

Technical Stack: Node.js, Serverless Framework, AWS Services (S3, DynamoDB, SNS, SQS, Cognito)

Address: https://github.com/miku-wwl/we_aws/tree/main/AWS-MS-Multi-Store-Backend

- Developed a multi - service backend application running on the AWS cloud platform using the Serverless framework.
- Integrated various AWS services such as S3 for storage, DynamoDB for data storage, SNS for message notification, SQS for message queuing, and Cognito for user authentication.
- Ensured the stability and performance of the system through continuous optimization.