Franz Lee

(👤 No Sponsorship Required)

📞 +1 (240) 660-0744　✉ franzlee1995@gmail.com　in [LinkedIn](#)　○ [Github](#)

Summary

- Senior Software Engineer with **4+** years of experience in building distributed systems and microservices using **Java**, **Golang**.
- Skilled in **Kafka**, **Redis**, **RabbitMQ**, and **PostgreSQL** for asynchronous messaging and high-concurrency processing.
- Experienced in **DevOps** automation and cloud deployment using **Docker**, **Jenkins**, and **AWS**.

Technical Skills

- Programming Languages: **Java (4+ yoe)**, **C/C++**, **Golang**, Python, SQL, HTML, CSS, JavaScript
- Framework: **Spring**, **Spring Boot**, **React**, Node.js, MyBatis, Hibernate, Kafka, RabbitMQ, Redis, Elasticsearch
- Databases: **PostgreSQL**, **MySQL**, **MongoDB**, Oracle
- Tools & Infra: **Git**, **Docker**, **AWS**(EC2, S3, Lambda, etc.), Linux, CI/CD, Jenkins, Kubernetes, Nginx, Terraform, Grafana
- Architecture: **Microservices**, **Distributed Systems**, Event-driven Design

Work Experience

Sangfor Technologies — Senior Software Engineer

EDR Vulnerability Detection Engine　　　　　　　　　　　　　　　　　　　　　　*2023 – 2024*

- Built a **microservices-based** vulnerability detection engine with asynchronous communication via **Kafka**, reducing system latency and enabling fast vulnerability scanning and automated patch delivery across 10,000+ endpoints.
- Implemented **Redis caching** for hot vulnerabilities and patches; applied **distributed log storage with read-write separation**, and designed **PostgreSQL partitioning** by endpoint ID with **composite indexes** on vulnerabilities, patches, and log types, resulting in a **55%** improvement in query performance.
- Integrated **Elasticsearch** to index vulnerabilities and alert logs for full-text search, enabling multi-criteria queries based on keywords, severity, and endpoint metadata, significantly improving log traceability and analysis efficiency.
- Mentored new interns to onboard the project quickly and collaborated on building **CI/CD** pipelines using **Docker** and **Jenkins**, accelerating release cycles.

Linux Office Sandbox　　　　　　　　　　　　　　　　　　　　　　　　　　　*2021 – 2022*

- Developed backend services using the **Spring Boot** framework, implementing **50+ RESTful APIs** with **Swagger** for documentation, receiving security policy configurations from the frontend and storing them in databases for synchronized delivery to endpoint agents.
- Designed a dual-storage architecture for sandbox policy management, storing flexible rule content and nested structures in **MongoDB**, while managing policy metadata, status, and terminal associations in **MySQL** through a custom data access layer built with **MyBatis** and **MyBatis-Plus**, reducing policy query and delivery latency by **40%**.
- Built a messaging architecture using **RabbitMQ** to support asynchronous policy dispatching from the management platform and alert log reporting from endpoint agents, enabling low-latency, reliable communication; optimized message throughput by **3×** through multi-queue routing, auto-acknowledgement, and failure recovery mechanisms.
- Developed a comprehensive testing framework for the policy service using **JUnit** and **Mockito**, simulating agent responses and policy flows; integrated with **GitLab CI/CD** pipelines to trigger automatic build, test, and deployment on commits, achieving **90%** test coverage and reducing build cycle time by **60%**.

Projects

SHOPLITE – Microservices E-Commerce Platform　　　　　　　　　　　　　　*2024 – 2025*

- Developed a **distributed** ecommerce platform with **microservices** for user, product, order, and payment modules, using **Spring Boot, Spring Cloud, React**, and service discovery/configuration via **Nacos**.
- Built asynchronous order processing and flash sale modules using **RabbitMQ** and **Redis (Redisson)**, decoupling workflows and ensuring high-concurrency inventory consistency at **10K+ QPS**.
- Integrated **Elasticsearch** for product indexing and real-time search with multi-criteria filters and fuzzy matching.
- Integrated **WebSocket** to support real-time communication for the online customer service module.
- Deployed via **Nginx** as a reverse proxy and load balancer to route traffic and isolate frontend from backend services.
- Set up and maintained **CI/CD pipelines** using **GitLab** and **Docker**, automating deployment to **AWS**.

Education

Southeast University
Master's Degree in Control Science and Engineering　　　　　　　　　　　　*Sep. 2018 { Jun. 2021*

Nanjing University of Aeronautics and Astronautics
Bachelor's Degree in Automation　　　　　　　　　　　　　　　　　　　　*Sep. 2013 { Jun. 2017*