# Yaolong Zhu

Mobile: +61 452329151 | Email: yaolong0612@gmail.com | Location: Melbourne, Australia

# **Summary**

Accomplished Senior Software Engineer and Architect with extensive experience delivering end-to-end solutions for complex business challenges. Adept at analysing intricate business requirements and translating them into scalable, high-performance, reliable, and maintainable technical solutions. Specialised in microservices architecture, event-driven systems, and cloud-native applications. Proven track record of designing and implementing robust systems for mission-critical platforms, leveraging Domain-Driven Design (DDD) and Test-Driven Development (TDD). Experienced in DevOps practices and Agile methodologies, fostering collaboration and efficient delivery. Certified in TOGAF with expertise in enterprise architecture.

#### **Skills**

- **End-to-End Solution Delivery:** Proven ability to design, develop, and deploy scalable, reliable, and maintainable systems from concept to production.
- Programming: Java (17+), Spring Boot, Spring Cloud, Spring Core, Spring MVC, Hibernate, MyBatis
- Architectural and System Design: Microservices, Event-Driven Systems, Domain-Driven Design (DDD)
- Database: MySQL, MSSQL, Redis; Proficient in JPA and ORM frameworks
- Messaging Systems: Apache Kafka, RabbitMQ
- API Design: RESTful APIs, GraphQL, SOAP
- Containerization and Orchestration: Docker, Kubernetes
- Testing and Development: TDD, JUnit, Mockito, Cucumber, Spock
- Build Tools and CI/CD: Gradle, Maven, Jenkins, GitHub Actions
- Cloud and DevOps: AWS, Azure; Logging and monitoring tools
- Version Control: Git, GitHub

# **Employment History**

#### **Sportsbet - Senior Software Engineer**

September 2023 – Present

- Led the migration of multiple services and shared components from Spring Boot 2 to Spring Boot 3, ensuring compatibility with Java 17 and improving maintainability across the system.
- Developed and maintained NRL and AFL betting systems, generating dynamic odds and selections for real-time betting operations.
- Designed event-driven microservices using Kafka and Spring Boot, incorporating DDD and TDD principles to enhance scalability, reliability, and maintainability.
- Collaborated with cross-functional teams to troubleshoot and resolve production issues, ensuring minimal downtime and 99.99% system availability during peak events.

• Conducted thorough code reviews to maintain coding standards and guide junior and mid-level engineers.

#### **Procter & Gamble - Application Architect**

July 2020 – March 2023

- Architected and maintained CRM-related microservices, ensuring scalability, security, and maintainability for consumer-facing applications.
- Refactored Account microservices using TDD, DDD, and database sharding, delivering a scalable system capable of supporting over 100 million members and handling 1600+ QPS during peak periods.
- Optimised Loyalty microservices, enabling flexible configuration of loyalty rules, enhancing user engagement and system reliability.
- Led the development of Guardian microservices with OAuth2 and JWT technologies to secure customer data and ensure compliance with privacy standards.
- Designed and developed a connector microservice to facilitate integration with multiple e-commerce platforms, supporting over 5 million daily orders.
- Provided architectural guidance and established best practices for the development team, including governance activities such as reviews, audits, and compliance assessments.
- Collaborated with cross-functional teams and business stakeholders to align technical solutions with strategic objectives.
- Contributed to the development of a consumer data platform, enabling targeted marketing strategies via channels like SMS and Al calls.
- Conducted code review and design review

#### Midea Group - Senior Software Engineer

March 2019 - July 2020

- Designed, implemented, and maintained Midea's International Channel Collaboration System, ensuring high availability and scalability.
- Utilised microservices architecture to decompose the existing monolithic application into smaller, manageable services, improving system modularity and maintainability.
- Adopted DevOps practices and tools such as Git, JIRA, Jenkins, Sonar, and logging & monitoring systems to streamline development, deployment, and continuous integration processes.
- Improved the core API response time from 1 second to 30 milliseconds by introducing Redis caching, drastically enhancing system performance.
- Implemented Kafka message queues to decouple system dependencies and improve fault tolerance, ensuring the system remains robust during peak loads or failures.
- Conducted regular code reviews and implemented quality assurance measures, maintaining code integrity and improving overall software quality.

#### **Hawkeye Data - Software Engineer**

December 2016 - December 2017

• Played a key role in setting up Hawkeye Data Engine (HDE) from scratch, contributing to both technical direction and foundational system design.

- Developed and deployed project management, report management, and task management services, leveraging microservices architecture and the Spring Cloud ecosystem.
- Collaborated closely with the product manager to define and prioritize key features for HDE, ensuring alignment with business needs.
- Created a Spark module to address HDE's big data processing requirements, optimising data handling and analytics capabilities.
- Worked with cross-functional teams to design, develop, and deploy software modules, significantly improving performance and overall system efficiency.
- Implemented best practices in software development, including conducting code reviews, thorough testing, and comprehensive documentation to maintain high standards of code quality and team collaboration.

### **HSBC - Software Engineer**

March 2015 - December 2016

- Focused on enhancing and maintaining the RAVEN (HSBC Counterparty credit risk core system) system, ensuring its continued reliability and functionality.
- Refactored RAVEN system code to improve readability and maintainability, leveraging Sonar hints to identify and resolve code quality issues.
- Collaborated with third-party suppliers to upgrade the platform and improve the price calculation module, while ensuring seamless updates to system interfaces.
- Enhanced RAVEN's support for multi-exchange rate calculations, improving the system's ability to handle complex pricing scenarios.
- Conducted unit tests, integration tests, and user acceptance tests to ensure the robustness and accuracy of the system after enhancements.

#### **Education**

- Feb 2013 Dec 2014: Master of Applied IT, Monash University
- Sep 2008 Jun 2012: Bachelor of E-commerce, Guangdong University of Finance & Economics

#### **Certificate**

TOGAF 9