#### **RICARDO FERREIRA**

Full Stack Developer – Software Engineer – Solutions Architect



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## **Summary**

An experienced Full Stack Developer and IT Solution Architect with over 20 years of experience, specializing in Java 11+ development for backend and enterprise-level applications. Extensive expertise in Java frameworks such as Spring, along with other technologies like PostgreSQL, MySQL, and MongoDB, as well as frontend frameworks like React. Skilled in designing and developing scalable, high-performance Java solutions that meet the demands of complex business systems, with a strong focus on microservices architectures.

Proven expertise in designing and implementing scalable RESTful APIs to support high-performance microservices-based systems for enterprise-level applications, particularly in cloud environments. While experienced with AWS (EC2, ECS, S3), I am adaptable to GCP environments. Skilled in writing clean, maintainable code, with a solid understanding of data structures, algorithms, and design patterns, while ensuring robust software security practices. Additionally, I have a strong foundation in CI/CD pipelines with hands-on experience in Jenkins, SonarQube, and related tools for unit, integration, and end-to-end tests.

Demonstrates strong interpersonal, leadership, and problem-solving skills, fostering collaboration and driving team motivation, with experience using Agile methodologies such as Scrum and tools like Jira to manage the development cycle and the demand for new features and products.

Recognized for excellent communication and mentoring abilities, guiding teams to successful project completion. Proactively tackles challenges to deliver high-quality results, ensuring alignment with organizational goals, and is fully committed to continuous improvement and innovation, striving for excellence in all endeavors.

#### **Work Experience**

## Full Stack Engineer Sotech Digital Payments – Brazil -

**2007 – present** 

Digital Payments Service Provider – <a href="https://www.sotech.com.br">https://www.sotech.com.br</a>

- Led the development of a digital funds transfer and payments platform as a service for a fintech startup, utilizing Java 11+, Spring Boot for the backend, and ReactJS and Angular for the frontend. The SimaTef PaaS processes over 100,000 transactions daily, demonstrating exceptional scalability, reliability, and performance.
- Spearheaded the deployment of a PCI-DSS-certified credit card payment platform, implementing a microservices architecture that included RESTful APIs, caching, reverse proxies, load balancers, and databases (SQL and NoSQL) within a fully containerized environment using Docker and Kubernetes. This initiative reduced total cost of ownership and operations by over 50% and improved scalability, allowing seamless growth as demand increased.
- Developed backend applications to optimize customer operations, integrating Oracle 11C, MySQL, and MongoDB databases, leveraging the CQRS design pattern to improve serviceability and availability metrics. This approach reduced operational costs by 55% while enhancing the platform's observability and monitoring capabilities for efficient realtime tracing.
- Implemented CI/CD pipelines using Git, Jenkins, SonarQube, and testing tools like Jacoco and Pitest Mutant to ensure code quality and streamline deployments, enabling faster and more reliable releases.
- Worked extensively with AWS (EC2, ECS, S3) to deploy and manage scalable cloudbased solutions, and I am adaptable to GCP environments. Familiar with pub/sub messaging and serverless programming to enhance real-time communication and

optimize backend processes.

Tools: Java 11+, Spring Boot, ReactJS, Angular, Hibernate, MongoDB, Oracle, MySQL, Linux, AWS, Git, Jenkins, SonarQube, Jacoco, Pitest Mutant, Jira

# Staff Software Engineer Vipway Telecom – Brazil

#### 2006/June-2007/October

Internet Services Provider - https://www.vipway.com.br

- Developed backend VoIP applications using the 'Kamailio' framework and MySQL DB, catering to over 5000 customers, resulting in a 25% increase in system reliability and performance.
- Successfully delivered and integrated AAA services for VoIP, resulting in a 40% reduction in authentication and authorization response time
- Created monitoring applications for distributed network service infrastructure, leading to a 30% decrease in downtime incidents and enhancing overall network stability.
- Conducted server load testing to evaluate system infrastructure capacity, ensuring the system could handle expected user demands and preventing potential performance bottlenecks.

Tools: C, MySQL, Linux, Apache, PHP

ITC Telecom - Brazil 1995/January–2006/May Tech Lead

Systems Integration – Internet Services Provider

- Spearheaded the development of management tools for the Systems Integration Unit, delivering robust applications that significantly improved operational efficiency across key company sectors.
- Developed management tools for the Wireless ISP Unit within the LAMP framework, automating connectivity service provisioning and resulting in a 30% increase in service delivery speed.
- Introduced advanced technologies nationwide, positioning the company as the leading provider of systems integration solutions in Brazil and achieving 40% market share growth within two years.

Tools: Linux, Apache, MySQL, PHP

#### **Key Projects**

• simaTef© (SaaS Digital Payment Platform):

Architected and developed a SaaS platform that supports digital payments for thousands of retail stores. Integrated multiple payment services, handling substantial daily transaction volumes. Built using Java, Spring Framework, Oracle, and Docker, serving 100.000 financial transactions per day;

simatefPAY© (Online Payment App):

Designed and developed an online real-time payment app for retail stores, enabling payment collection via web links, shared through SMS or social media apps. Developed using Java 17, Spring Boot, MongoDB, and Angular.

## FinOps Platform:

Developed a real-time monitoring and management tool that tracks the status of microservices within the SimaTef© SaaS platform. Built using Spring, Docker, Redis, and MongoDB.

## **Skills & Tools**

- Languages: Java, C, PHP, JavaScript
- Frameworks: Spring Boot, Angular, ReactJS, Laravel
- Cloud & Infrastructure: AWS (EC2, ECS, S3), Docker, Oracle Cloud
- Databases: Oracle, MySQL, MongoDB
- CI/CD & DevOps: Jenkins, Git, Docker, OAuth2
- Architectural Expertise: Microservices, RESTful APIs, Cloud Migration, Scalable Infrastructure

#### **Academic Education**

2023 PGDip	in Full Stack Web Development Faculdade Unyleya, Federal District Brazil
2009 - 2010	PGDip in Software Engineering Faculdade Unyleya, Federal District Brazil
2001 - 2002	PGDip in Computer Science Mackenzie University, Sao Paulo, Brazil
1993 - 1998	BSc in Electrical Engineering Sao Judas University, Sao Paulo, Brazil

## Languages

English: Advanced

Portuguese: Native

#### **Certifications**

- AWS Foundational by aws.com, 2024
- AWS Practicioner by aws.com, 2024
- Oracle Cloud Certified Architect Associate by www.oracle.com (2023)
- Oracle Cloud Certified Foundations Associate by www.oracle.com (2023)
- Javascript: Algorithms and Data Structures by FreeCodeCamp.org, 2023