

André Felipe Carvalho Pinheiro

São Luís, Maranhão - Brazil | andre.carvalhop94@gmail.com | +55 98984471746 | GitHub: AndreCarvalho94

Professional Summary

Senior Software Engineer with 9+ years mastering Java, Spring Boot, and microservices architecture. Proven track record designing and building scalable backend solutions using event-driven systems, Kafka, and cloud technologies (primarily Google Cloud Platform) at leading fintech and banking institutions including Mastercard, Deutsche Bank, Santander Bank, Itaú Bank and Picpay.

Developed a high-impact Subscription Hub for PicPay, architecting a scalable backend that processes 500k+ credit card transactions daily. Implemented real-time classification of user expenses into subscriptions and recurring costs using Java 21, Spring Boot, and Kafka for event streaming, with Redis for high-throughput caching.

Specialized in modernizing legacy monolithic systems into cloud-native microservices, implementing event-driven architectures, and establishing observability best practices. Self-driven engineer with strong track record of taking ownership of projects, proactively identifying solutions, and delivering impact without waiting for explicit direction—consistently driving technical excellence and meeting ambitious business goals.

Committed to software excellence through adherence to clean code principles, SOLID design patterns, comprehensive automated testing, and continuous integration/deployment pipelines. Skilled in full development lifecycle from architecture design to production support with emphasis on code quality and system reliability.

Background strengthened by academic research in machine learning and computer vision, including publications and awards from Federal University of Maranhão. Self-driven learner passionate about staying current with cutting-edge technologies and best practices in distributed systems, DevOps, and cloud infrastructure.

Professional Experience

Senior Software Engineer
GFT Group / Mastercard

Jan 2025 – Present
Remote

- **Rede Project:**
 - Integrating **Click to Pay** with **Passkeys** into payment link solution for Rede (Itaú's merchant acquirer) using **Java 21** and **Spring Boot** backend with **Go**, **Gin**, and **Fiber** microservices
 - Modernizing 50+ applications with enhanced observability using **Datadog**, deployed via **Argo CD** with **GitHub Actions** CI/CD pipelines
 - **Stack:** Java 21, Spring Boot, Go, Gin, Fiber, Datadog, GitHub Actions, Argo CD
- **Picpay Project - Subscription Hub:**
 - Architected and developed subscription hub serving Picpay (leading Brazilian fintech) processing **500,000+ transactions daily** using **Java 21**, **Spring Boot**, **Kafka** event streaming, and **MongoDB** for high-availability data persistence
 - Classified credit card transactions into subscriptions/recurring expenses across users' bank accounts with **Redis** caching and **AWS** infrastructure (ECS, Lambda, S3)
 - **Stack:** Java 21, Spring Boot, Kafka, MongoDB, Redis, AWS (ECS, Lambda, S3), GitHub Actions, TestContainers, REST Assured, JUnit
- **Unlimit Project - Click to Pay Checkout:**
 - Designed and implemented **Mastercard Click to Pay** integration for Unlimit payment gateway using **Java**, **Spring Boot**, and **Kafka** event streaming
 - Deployed with **GitHub Actions** and **Argo CD** for automated deployment pipelines
 - **Stack:** Java, Spring Boot, Kafka, GitHub Actions, Argo CD, TestContainers, REST Assured, JUnit

Senior Software Engineer
GFT Group / Deutsche Bank

Jun 2022 – Jan 2025
Global

• **User Manager Application:**

- Designed and developed comprehensive user account management system across banking products in international team environment using **Java**, **Spring**, and legacy **Struts** framework
- Full-stack development persisting to **Oracle** database with **JSP** and **JavaScript** frontend, implementing fine-grained permission and account limit controls
- **Stack:** Java, Spring, Oracle, Mockito, JUnit, JavaScript, JSP, Struts

Senior Software Engineer
GFT Group / SulÁmerica Saúde

Feb 2020 – Jun 2022
Remote

• **Interop Connector:**

- Built **GCP Cloud Functions**-based application connecting third-party partners and translating data to **HL7 FHIR** international health standards using **Kafka** and **Spring Boot** microservices
- Implemented event-driven architecture with **GCP Pub/Sub**, **Redis** caching, and **Node.js** integration services for reliable data distribution
- **Stack:** Java, Spring Boot, Kafka, Redis, GCP (Cloud Functions, Pub/Sub), Node.js

• **Screening Application:**

- Developed questionnaire management platform with **Java**, **Spring Boot**, and **Spring Cloud**, migrating on-premise applications to **GCP** (primary) using serverless patterns
- Implemented event-driven microservices with **Kafka** and **ActiveMQ** persisting to **PostgreSQL** and **Oracle** with **Clean Architecture** and **BDD** testing
- **Stack:** Java, Spring Boot, Spring Cloud, Kafka, ActiveMQ, PostgreSQL, Oracle, GCP (Cloud Functions, Pub/Sub), AWS, TestContainers, Cucumber, BDD, Jenkins, OpenShift, SonarQube, Dynatrace

Senior Software Engineer
Accenture / Santander Bank

Aug 2019 – Feb 2020
Remote

• **Santander Friends:**

- Architected and developed **Java 8** microservices application for profit-sharing donations to charitable institutions using **Spring Boot**, persisting to **Oracle**
- Deployed on **OpenShift** with **Jenkins** CI/CD pipelines and implemented batch integration jobs with **Dynatrace** monitoring and **SonarQube** quality gates
- **Stack:** Java 8, Spring Boot, Oracle, OpenShift, Jenkins, Batch integrations, SonarQube, Dynatrace

Java Fullstack Developer
D2TI

Oct 2017 – Aug 2019
Brazil

• **Government Tax System:**

- Developed and maintained tax system applications for Brazilian states (Maranhão, Bahia, Piauí) using **Java**, **JSF/RichFaces** frontend with **PL/SQL** and **Oracle** backend
- Modeled complex business rules for state and municipal tax processing with **SonarQube** quality assurance and version control via **SVN**
- **Stack:** Java, JSF, RichFaces, JSP, HTML, PL/SQL, Oracle, SonarQube, SVN

Education

Universidade Federal do Maranhão Bachelor of Computer Science
Jan 2013 – Jan 2019 São Luís, Maranhão - Brazil

Academic Projects, Publications & Awards

- **Automatic Evaluation of the Excavation/Disc Ratio for Glaucoma Detection (2016)** — Published in Maranhense Informatics Journey; machine learning and convolutional neural networks for retinal imaging analysis
- **Computational Methodology for Automatic Detection of Glaucoma in Fundus Images (2015)** — Published in XV Medical Informatics Workshop, XXXV Congress of the Brazilian Computer Society
- **FAPEMA Award Nomination (2016)** — Foundation for the Support of Research and Scientific/Technological Development of Maranhão
- **More Human Development Index Award (2016)** — State Secretariat of Science, Technology and Innovation of Maranhão
- **2nd Place Oral Presentation - XXVII Scientific Initiation Seminar (2015)** — Federal University of Maranhão
- **Champion Award - IV EAComp Scientific Articles Exhibition (2015)** — Department of Informatics, Federal University of Maranhão

Technical Skills

Core Expertise: Java (Spring Boot, Spring Cloud), Microservices Architecture, Event-Driven Systems, Kafka, RESTful APIs

Cloud Platform: Google Cloud Platform (GCP) — Cloud Functions, Pub/Sub, GKE, BigQuery

Databases & Caching: PostgreSQL, Oracle, MongoDB, Redis, MySQL

DevOps/Deployment: Docker, Kubernetes, OpenShift, Jenkins, CI/CD Pipelines, SonarQube

Testing & Quality: JUnit, Mockito, TestContainers, REST Assured, Cucumber, BDD

Observability: Datadog, Dynatrace, ELK Stack

Additional Languages & Tools: Kotlin, JavaScript, C++; RabbitMQ, AWS (Lambda, S3, ECS); Azure DevOps, Swagger