

LISBEY URREA MARIN

Senior Software Engineer & Technical Lead

Medellin, Colombia · urlisbey@hotmail.com · [LinkedIn](#) · Available for freelance engagements

PROFESSIONAL PROFILE

Senior Software Engineer & Technical Lead with 10+ years of experience delivering high-performance backend systems in Java — specializing in distributed microservices, reactive programming, and enterprise messaging platforms.

Proven track record across retail, transit, and web platform clients: scaling systems from design through production, reducing errors, and leading cross-functional engineering teams. Deep expertise in functional and reactive programming (Spring WebFlux, Project Reactor), event-driven architecture (Kafka), design patterns, multithreading, and performance engineering.

Most recently led end-to-end technical delivery of an omnichannel messaging platform (SMS/MMS/RCS) for Albertsons Companies — 19 retail banners, 100M+ messages/month — including a real-time TCPA compliance layer that mitigated millions in legal exposure and a 10× throughput improvement using Java 21 Virtual Threads.

Bilingual English / Spanish. Available for freelance engagements in technical leadership, architecture, and hands-on engineering.

WORK EXPERIENCE

Sapient — Plano, Texas, USA (Oct 2024 – Present) | Remote, Medellín, Colombia (Jan 2022 – Oct 2024)

Position title: Technical Lead

Client: **Albertsons Companies**

Led end-to-end technical delivery of a unified omnichannel messaging platform (SMS/MMS/RCS) serving 19 grocery and pharmacy retail banners. Owned architecture, hands-on development, and cross-functional team leadership across the full microservices stack — from audience segmentation to carrier delivery — processing 100M+ customer messages monthly.

TCPA Compliance Engineering

Designed and implemented a real-time compliance enforcement layer that eliminated legal exposure from two classes of TCPA violations — sending promotional messages to non-opted-in customers, and messaging outside legally permitted hours. The opt-in check was enforced at send time, not upstream, to catch any data inconsistency. This work directly reduced Albertsons' litigation risk and saved millions in potential lawsuit settlements.

Platform Scale & Performance

- Re-architected the Delivery Receipt processing pipeline using Java 21 Virtual Threads, scaling throughput from 500 to 5,000 TPS — a 10× improvement — reliably handling 100M+ messages per month across 19 retail banners.
- Optimized the Marketing Unified Messaging Service reactive core using Spring WebFlux, Kafka parallel processing, and MongoDB, improving throughput from 80 to 500 TPS (6×) through targeted performance engineering.

Channel & Architecture

- Led RCS channel integration end-to-end: worked directly with Sinch to configure Google RCS Business Agents, integrated Sinch APIs, and redesigned the messaging dispatch layer using the Command Pattern — enabling seamless multi-channel extensibility (SMS → MMS → RCS) without service rewrites.
- Expanded customer reachability by 30%+ beyond SMS/MMS by introducing RCS as a supported channel across all 19 retail banners.
- Owned the full microservices stack: marketing orchestration, Kafka event pipelines, MongoDB data layer, and Sinch API integration — from architecture decisions through production deployment.

Observability & Reliability

- Built the observability stack using Grafana and Loki, ingesting full application logs from Sinch and downstream services — enabling real-time dashboards for message delivery, throughput monitoring, and carrier-level failure detection.
- Applied distributed tracing and reactive resilience patterns (Project Reactor, WebFlux) across all microservices, ensuring fault-tolerant, observable processing at scale.

Team & Delivery

- Led and mentored a distributed engineering team, establishing coding standards, driving code reviews, and accelerating junior developer growth through hands-on technical guidance.
- Collaborated with the solutions architect on system design, translating business requirements from marketing and compliance stakeholders into production-grade distributed architecture.

Sofka Technologies — Medellín, Colombia (Oct 2019 – Dec 2021)

Position title: Software Development Analyst Lead

Client: Medellín Metro — 27 stations · Real-time passenger validation system

Led the modernization of a critical legacy system powering the turnstile network across all 27 stations of Medellín's metro — a system so fragile that any change risked breaking production for the entire transit network.

Legacy Modernization

The existing application had reached a point where no improvements could be made safely — any update caused system-wide failures across stations. Led the full re-architecture of the application, decoupling components and stabilizing the platform so the Metro could confidently deploy updates again.

Hardware Integration

Once the platform was stable, the modernization unlocked a hardware upgrade cycle blocked for years. Worked directly with card reader manufacturers, coordinating integration and configuration so the new reader machines — responsible for validating transit cards and opening turnstiles in real time — came fully operational across all 27 stations.

Technical Delivery

- Led Java microservices migration from legacy monolith using Spring Boot and Quarkus, improving system stability and enabling safe deployments for the first time in years.
- Implemented real-time card validation logic integrated with turnstile hardware APIs across the full station network.
- Led engineering team through code reviews, technical guidance, and delivery oversight.
- Applied functional and reactive programming; administered MySQL, SQLite, and MongoDB databases.

INTAP — Medellín, Colombia (Sep 2018 – Oct 2019)

Position title: Software Development Analyst

Client: FGA – Fondo de Garantías de Antioquia (key client)

Worked across multiple client engagements as a full-stack Java developer, delivering RESTful APIs, web applications, and mobile solutions for financial and enterprise clients.

Key Project — FGA Mobile App

Designed and built end-to-end a customer-facing mobile application for one of Colombia's leading credit guarantee funds, enabling customers to make loan payments, negotiate payment agreements, and manage their financial obligations from their phone.

- Built the mobile application (Ionic/Angular) and the Java/Spring Boot backend — full ownership from API design to deployment.
- Designed RESTful APIs for payment processing, agreement management, and customer account operations.
- Integrated mobile frontend with backend ensuring secure data handling for sensitive financial transactions.
- Managed MySQL and SQLite databases supporting the application data layer.

EDUCATION

Systems Engineering · National Open University and Distance (UNAD) 2016

Specialized Technician, ADSI · SENA 2012

SKILLS

Languages & Frameworks: Java (Advanced) · Spring Boot · Spring WebFlux · Project Reactor · Quarkus · Node.js (Basic)

Messaging & Architecture: Apache Kafka · Sinch RCS/SMS/MMS APIs · Google RCS Business Agents · Microservices · Event-driven architecture · RESTful APIs

Databases: MongoDB · MariaDB · PostgreSQL · MySQL · SQLite

Cloud & DevOps: Google Cloud Platform · AWS · Azure · Docker · CI/CD · Git

Observability: Grafana · Grafana Loki · Distributed tracing

Practices: TCPA Compliance · Design Patterns · Multithreading · Unit & Integration Testing · Code Review · Mentorship

Languages: English (Fluent) · Spanish (Native)