

Luis German Rodriguez Tanamachi

Senior Backend Engineer | Fintech · Healthcare · E-Commerce

Culiacán, Sinaloa, Mexico | Germantanamachi098@outlook.com | +52 55 2446 9678 |
<https://www.linkedin.com/in/luis-german-rodriguez-tanamachi-000a42390/>

Professional Summary

Senior Backend Engineer with 10+ years of experience designing, migrating, and operating large-scale, low-latency, event-driven backend systems in fintech, healthcare, and high-traffic data platforms. Deep expertise in Java-based microservices, distributed systems, and high-throughput data processing, with production experience supporting systems handling thousands to millions of events per day and complex transactional workloads. Proven ability to decompose monolithic architectures into service-based APIs, design fault-tolerant event pipelines using Kafka, and own services end-to-end from architecture and implementation through monitoring and incident response. Strong background in performance engineering, observability, CI/CD automation, and production debugging, combined with a track record of mentoring engineers and collaborating cross-functionally with product, mobile, data, and DevOps teams to deliver reliable, scalable platforms under real-world constraints.

Professional Experience

Octaura Inc. — New York, NY

Senior Backend Engineer (Fintech Infrastructure) | Apr 2024 – Oct 2025

- Designed and implemented core backend microservices using Java, Spring Boot, Kafka, and PostgreSQL, supporting high-throughput financial workflows and event-driven data propagation across multiple downstream services.
- Led decomposition of tightly coupled backend components into service-based APIs, improving scalability, deployment independence, and system resilience under increasing transaction volume.
- Built and operated low-latency, event-driven pipelines processing thousands of financial events per day with strict requirements around ordering, idempotency, and fault tolerance.
- Performed performance analysis and optimization on critical execution paths, leveraging profiling, structured logging, and metrics to reduce latency in production systems.
- Owned services end-to-end, from architectural design and implementation through deployment, monitoring, incident response, and post-incident analysis.
- Partnered closely with DevOps teams to enhance CI/CD pipelines using GitHub Actions, improving deployment safety and reducing rollback frequency.

- Provided senior-level mentorship through code reviews, architectural guidance, and hands-on debugging support in complex distributed environments.

H1 Inc. — New York, NY

Senior Backend Engineer | Sep 2021 – Mar 2024

- Architected and maintained distributed Java-based data processing services handling millions of records, enabling downstream analytics, personalization, and data-driven decision-making.
- Designed event-driven service interactions using messaging patterns to decouple producers and consumers while maintaining data consistency and operational visibility.
- Collaborated with Product, Data Science, and Analytics teams to co-create API contracts and backend capabilities supporting experimentation and evolving data models.
- Built internal automation frameworks for data validation, schema evolution, and quality enforcement, significantly reducing manual intervention and operational risk.
- Implemented and operated containerized services on Kubernetes, working closely with DevOps to improve deployment reliability and observability.
- Actively debugged production incidents across multiple service layers, identifying root causes and contributing to blameless post-mortems and long-term fixes.
- Mentored junior engineers through pair programming, design reviews, and production-readiness practices.

Jeeves Inc. — Remote / Global

Backend Engineer (Fintech Platform) | Jul 2018 – Aug 2021

- Developed secure, multi-region backend services using Java, Spring Boot, and PostgreSQL to support real-time transaction processing and financial reconciliation workflows.
- Designed systems with careful consideration of data locality, read/write amplification, and consistency trade-offs in distributed environments.
- Implemented real-time monitoring and alerting using metrics and error tracking tools, reducing mean time to detection and recovery for production issues.
- Worked closely with mobile and web teams to co-design APIs that balanced performance, usability, and long-term maintainability.
- Partnered with DevOps to containerize services and improve CI/CD automation, enabling faster and safer releases.
- Contributed to architectural decisions around service boundaries, caching strategies, and asynchronous processing models.

Ve Global — London, UK

Backend Engineer (E-Commerce & AdTech) | Nov 2014 – Jun 2018

- Enhanced backend analytics and data aggregation services consuming distributed event streams to deliver near real-time insights at scale.

- Supported migration from monolithic and on-premise systems toward cloud-based, service-oriented architectures on AWS.
- Improved system performance and reliability through incremental refactoring, better service isolation, and clearer API boundaries.
- Collaborated with product and analytics stakeholders to translate business requirements into scalable backend implementations.
- Supported CI/CD workflows and production deployments, gaining hands-on experience with live system operations and debugging.

Technical Skills

Languages & Runtime: Java (JVM), Python, JavaScript, TypeScript, C#

Backend Architecture: Microservices, Service-Oriented Architecture, REST APIs, GraphQL, gRPC

Event & Data Processing: Kafka, Event-Driven Architecture, Asynchronous Pipelines, Stream Processing Concepts

Databases & Storage: PostgreSQL, MySQL, MongoDB, SQL Server, Data Modeling, Schema Design, Data Consistency

Distributed Systems: High-Throughput Services, Fault Tolerance, Idempotency, Ordering Guarantees

Cloud & Orchestration: AWS, Docker, Kubernetes

Performance & Reliability: Profiling, Load Testing, Latency Optimization, Backpressure Awareness

DevOps & CI/CD: GitHub Actions, Jenkins, Automated Deployments, Infrastructure Collaboration

Observability & Ops: Logging, Metrics, Distributed Tracing, Incident Debugging, Post-Mortems

Leadership & Collaboration: API Co-Design, Cross-Functional Ownership, Mentorship, Pair Programming

Education

Bachelor of Science in Computer Science

Georgia Institute of Technology (Georgia Tech) | Atlanta, GA | 2009 – 2014