Saravana Thiyagarajan

Senior Backend Engineer (Fintech) | Node.JS | Go | Payments | Distributed Systems | Cloud Architecture
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Backend Engineer with 5+ years of experience specialising in payment infrastructure, distributed systems, and high-reliability backend platforms. Strong experience building scalable backend services and APIs using **Node.js, JavaScript, Go, Python, and PHP**, with expertise in asynchronous processing, event-driven architecture, databases, Redis, and AWS.

SKILLS

Backend Technologies: **Go, FastAPI, Laravel, Microservices**
Programming Languages: **Node.JS | Go | Python | PHP | JavaScript | SQL**
Databases : **PostgreSQL | Redis | MySQL | SQL Server | PgBouncer**
Cloud & Infrastructure: **AWS (Lambda, ECS, EKS, RDS, SNS, SQS, Route 53) | Docker | Terraform**
Distributed Systems: **Event-Driven Architecture| Asynchronous Processing | Workflow Orchestration | Distributed Transactions**
Observability: **OpenTelemetry | New Relic | Performance Profiling | Grafana | Prometheus**
Engineering Practices: **System Design | Clean Architecture | CI/CD | Performance Optimization**

Aura Gold Remote, India · 2025 –Present

Senior Backend Engineer, Payments

- Owned the architecture and delivery of a Go-based payment platform supporting **300+ TPS** for a fintech serving **1.8M+ users**, achieving **~485 ms p99 latency** while ensuring high availability and transactional reliability.
- Designed and implemented an immutable financial ledger that became the system of record for customer asset balances, supporting atomic multi-entry accounting, reversals, reconciliation, auditability, and historical balance reconstruction.
- Designed event-driven payment workflows using **AWS SNS/SQS** and **PostgreSQL** to ensure reliable asynchronous processing, failure recovery, and exactly-once business semantics through idempotent processing.
- Architected a modular payment workflow engine supporting validation, pricing, ledger posting, notifications, and event publishing, enabling rapid onboarding of new payment flows while maintaining transactional consistency.
- Led architectural discussions, **production releases**, and technical decision-making for **payment infrastructure**, driving engineering best practices across the backend platform.

Upland Software Remote · 2023–2025

Software Development Engineer - 1

- Built reusable backend platform services adopted across multiple SaaS products, reducing engineering duplication and improving platform consistency.
- Developed an AI-powered Retrieval-Augmented Generation **(RAG)** service integrating multiple enterprise systems, increasing user engagement by **15%** through contextual knowledge retrieval.
- Re-architected long-running reporting workflows using asynchronous processing, background workers, and WebSocket-based progress notifications, reducing report generation time from **minutes to near real-time**.
- Designed scalable backend APIs and optimised database interactions to improve application performance, maintainability, and system responsiveness.
- Worked closely with cross-functional teams to deliver enterprise features while maintaining production quality and engineering standards.

Nextbrain Technologies Bangalore, Karnataka · 2022–2023
Software Engineer

- Built backend services for a last-mile delivery platform serving **40,000+ daily requests**, focusing on scalability, API performance, and operational reliability.
- Reduced API response time from approximately **3 seconds to under 300 ms** through Redis caching, SQL optimisation, and CDN integration.
- Designed REST APIs, optimised database queries, and improved backend performance for logistics workflows.
- Led the end-to-end development of a multi-tenant **Digital Signage SaaS platform**, driving architecture, backend development, and product delivery from concept to production.

Exciteon Technologies Trichy, Tamil Nadu · 2021–2022
PHP developer

- Built an end-to-end **loan management system** serving **50,000+ users**, including customer onboarding, loan lifecycle management, **EMI schedules**, repayment tracking, and **automated instalment reminders.**
- Designed reusable **RBAC authorisation** and **rewards management modules** for logistics and **fintech** products, reducing duplicated engineering effort across multiple applications.
- Developed backend services and REST APIs using PHP and MySQL, focusing on scalability, maintainability, and reliable financial workflows.
- Built **LoanStories**, a loan origination platform with an **internal CRM** for lead management, customer onboarding, loan processing, and sales workflow automation.

PROJECTS

GoQueue Distributed Job Queue for Go (**251+ GitHub Stars**)

- Built an open-source distributed job queue library in Go supporting In-Memory, Redis, PostgreSQL, SQLite, and AWS SQS, enabling seamless migration from local development to production-scale deployments.
- Designed a pluggable architecture with configurable storage backends, worker pools, middleware pipelines, retries, dead-letter queues (DLQ), scheduling, and graceful shutdown.
- Implemented production-ready features including retry policies, exponential backoff, observability hooks, and extensible middleware for building reliable background processing systems.
- Published as an open-source project on GitHub with **251+ stars**, adopted by the Go community as a flexible job processing framework.

EDUCATION

Srimad Andavan Arts & Science College
Thiruvanaikoil, Tiruchirappalli, Tamil Nadu

Bachelor of Computer Applications (BCA), Computer Science
Jun 2018 – Apr 2021
Grade: A