

Siman Shrestha

Senior Software Engineer

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Senior Backend Engineer with 5+ years building scalable financial services platforms and APIs. Experienced in payment systems, microservices architecture, and distributed computing. Currently developing Visa Accept, processing \$1B+ annually and serving 1M+ micro merchants. Relocating to NYC by December 2025.

TECHNICAL COMPETENCIES

Programming Languages: Java, Python, TypeScript, JavaScript

Frameworks: Spring Boot, NestJS, Node.js, LangChain, LangGraph, React, Angular

Databases: MySQL, PostgreSQL, MongoDB, Redis, Hazelcast

Cloud & Tools: AWS, Docker, Kubernetes, Kafka, GraphQL, CI/CD, MCP

EXPERIENCE

Visa | Austin, TX - Hybrid

Senior Backend Software Engineer

Sep 2024 – Present

- Built concurrent merchant-facing payment APIs serving 1M+ merchants using Java/Spring Boot/MySQL/Hazelcast, processing \$1B annually across 5 countries.
- Developed payment configuration APIs that streamline direct fund transfers from buyers to sellers, enabling banks to deploy flexible POS solutions for iOS and Android devices.
- Collaborated with iOS client and product teams to define API specifications for merchant and banking partner needs
- Implemented HMAC signing for API authentication and message-level encryption for payment confidentiality.
- Pioneered Visa Accept Agent using GPT-4o/Python/LangChain to transform payment data into business intelligence for micro merchants, achieving SVP endorsement and executive board approval for development.

Hinge Health | Austin, TX - Remote

Backend Software Engineer II

Aug 2023 – Jul 2024

- Developed TypeScript/NestJS microservices to manage and protect sensitive health data for 30M patients.
- Accelerated patient outreach by 2.5 days and drove 6% user registration growth by redesigning the insurance data ingestion pipeline, achieving a 40% increase in throughput with an event-driven Kafka architecture.
- Reduced compute load by 30% by implementing Redis-backed BullMQ job queue for asynchronous processing.
- Enhanced system reliability through Kubernetes probe management and the implementation of graceful shutdown.

Visa | Austin, TX - Hybrid

Senior Fullstack Software Engineer - Observability

Jan 2022 – Aug 2023

Fullstack Software Engineer - Middleware

Oct 2020 – Jan 2022

- Built a real-time metrics dashboard serving 500+ reliability engineers, reducing infrastructure load by 90% using GraphQL WebSocket subscriptions and Redis caching.
- Led deployment of Grafana Enterprise in a distributed environment, expanding monitoring to maintain 99.99%+ uptime for critical payment APIs used by 1000+ engineers.
- Owned an in-house observability portal used by 1000+ engineers using React/Node.js/MongoDB/MySQL.

EDUCATION

Texas A&M University, College Station, TX

May 2020

Bachelor of Science in Computer Science, Minor in Visualization