

# Sushov Karmacharya

Backend Software Engineer · Distributed Systems · Cloud Infrastructure

sushov.com — karmacharya.sushov@gmail.com — San Francisco Bay Area (Hybrid/On-site)

## Summary

Backend Software Engineer with 6+ years of experience building and operating **distributed systems in production**. Strong background in **Java, Python, Node.js, SQL, and cloud-native infrastructure (Kubernetes/Terraform)**. Known for owning services end-to-end, optimizing high-throughput APIs, and ensuring data correctness in financial systems.

## Experience

### Senior Software Engineer (Backend / Platform)

Aug 2019 – Sep 2022

Curves n' Colors Pvt. Ltd.

(Enterprise SaaS)

- Designed and operated backend services handling **high-volume concurrent traffic** with strict availability requirements (99.9% uptime).
- Built and deployed **containerized services using Docker and Kubernetes**, automating CI/CD to reduce deployment time by **60%**.
- Refactored legacy backend components, reducing API latency by **40%** on critical request paths through SQL optimization and Redis caching.
- Owned production systems including monitoring (Prometheus/Grafana), alerting, and on-call incident response.
- Served as a core backend engineer while concurrently co-founding and scaling ThunderCodes.

### Co-Founder / Backend Engineer

Jul 2019 – Sep 2022

ThunderCodes

(Software Startup)

- Architected backend systems from first principles for customer-facing platforms serving **10k+ daily users**.
- Built scalable APIs and data pipelines using **Java and Node.js**, making trade-offs between performance, cost, and speed-to-market.
- Translated ambiguous business requirements into concrete technical specs and shipped solutions end-to-end.
- Managed production infrastructure, debugging live issues and scaling databases without dedicated DevOps support.

### Senior Backend Developer

Jul 2016 – Feb 2019

KlientScape Software

(Enterprise ERP Systems)

- Built core backend modules for accounting and inventory systems where **data consistency (ACID)** was non-negotiable.
- Optimized PostgreSQL schemas and queries, reducing reporting latency by **25%** for multi-million row datasets.
- Developed automated error-handling pipelines to ensure financial data integrity during network failures.

## Key Projects

### Cloud-Native Infrastructure & DevOps Portfolio

2023 – Present

- Serverless Visitor Counter (GCP)**: Architected a serverless backend using Cloud Functions (Python) and Firestore; automated provisioning via **Terraform** and CI/CD via GitHub Actions.
- LLM Security Evaluation Tool**: Built a hybrid evaluation engine using the **Gemini API**, combining deterministic rule-based checks with model-graded risk scoring to detect prompt injection.
- K8s Cluster Ops**: Deployed and managed self-healing Kubernetes clusters for personal projects, utilizing Helm charts and Ingress controllers.

## Technical Skills

Languages	Python, Java, Node.js/TypeScript, Go, SQL (PostgreSQL), Bash
Backend	Distributed Systems, REST APIs, Microservices, Event-Driven Architecture
Infrastructure	Docker, Kubernetes, Terraform, CI/CD (GitHub Actions)
Cloud	Google Cloud Platform (GCP), AWS (working knowledge)
Databases	PostgreSQL, NoSQL (DynamoDB/MongoDB), Redis

## Education

### Georgia Institute of Technology

Expected Spring 2026

Master of Science in Computer Science (OMSCS)

Focus: Distributed Systems, Operating Systems, Computer Networks