

Ratnesh Maurya

Backend Engineer (Golang, Distributed Systems, AWS, Kafka)

+91 8601959054 | ratneshmaurya2311@gmail.com | [in ratnesh-maurya](https://www.linkedin.com/in/ratnesh-maurya) | [gh ratnesh-maurya](https://github.com/ratnesh-maurya)
ratnesh-maurya.com | blog.ratnesh-maurya.com

TECHNICAL SKILLS

Languages : Golang, Elixir, C++, SQL
Systems & Architecture: Microservices, gRPC, Protobuf, Kafka, Concurrency, REST APIs
Databases & AI : PostgreSQL, Redis, Qdrant (Vector Search), MongoDB, Semantic Retrieval
Infrastructure & Obs : AWS, Kubernetes (Operators/CRDs), Docker, Prometheus, Grafana, pprof

EXPERIENCE

[Initializ Pvt. Ltd.](#) | Software Development Engineer Gurugram, India | July 2024 – Present

- **Tech Stack**: Golang, Elixir, Kafka, Redis, PostgreSQL, Qdrant DB, AWS, Prometheus
- Developed a concurrent log analyzer utilizing **Go-routines** and **Mutex** locks, reducing RCA turnaround time by **60%** through optimized identification of lock contention bottlenecks.
- Engineered a production-grade **RAG** platform using **Qdrant DB** and vector embeddings; optimized system throughput via custom **Middleware** and semantic query caching.
- Built a centralized **Notification Microservice** using **Kafka**, **Redis**, and **Protobuf** for high-performance internal communication; achieved **99.87%** exactly-once delivery via idempotency patterns.
- Implemented observability for Go microservices using **pprof**, **Prometheus**, and **Grafana**, successfully identifying memory leaks and reducing heap allocation by **30%**.
- Engineered the **LoanNetwork** AI assistant and onboarding flow with **MCP** and **Experian/CIBIL** integrations, reducing verification times by **25%** via automated pipelines.

[Initializ Pvt. Ltd.](#) | Software Developer Intern Gurugram, India | Aug 2023 – June 2024

- Engineered a **Secret Management Microservice** and a custom **Kubernetes Operator** ([secrets-operator](#)) utilizing **CRDs** for secure, automated credential injection based on a custom **Threat Model**.
- Developed client-side cryptographic encryption/decryption flows in **TypeScript** using **Web Crypto API** to ensure zero-knowledge data integrity and end-to-end security for sensitive secrets.
- Launched the [Initializ Documentation](#) platform, managing server-side infrastructure and content architecture for developer onboarding.

PROJECTS

[Flo](#) | Golang, MCP, CLI Mar 2026

- Engineered a high-performance CLI tool in **Golang** that brings Stack Overflow to the terminal via **MCP**, enabling real-time code browsing and query resolution via local terminal execution.

[Ratn Tools Suite](#) | TypeScript, Next.js Aug 2025 – Present

- Built secure developer utilities for JSON validation and compression; implemented **client-side processing** to ensure zero data persistence and maximum privacy for sensitive payloads.

[Personal Tracker](#) | TypeScript, Next.js, MongoDB Mar 2026

- Developed a life-tracking platform utilizing **MongoDB** for flexible data schemas, featuring custom visualization logic for personal financial and habit analytics.

EDUCATION

Dr. APJ Abdul Kalam Technical University | B.Tech in CSE Kanpur, India | 2020 – 2024 | **8.0 CGPA**

Maharshi Patanjali Vidya Mandir | Intermediate Allahabad, India | 2017 – 2019 | **84.02%**