

Udhayarajan M

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PROFESSIONAL SUMMARY

Backend Engineer with 3+ years of experience owning and operating production backend systems, designing high-throughput microservices in Go with Kubernetes, PostgreSQL, and Kafka. Strong focus on reliability, automation, and DevOps-driven delivery.

EDUCATION

Karpagam College of Engineering, Coimbatore
Bachelor of Engineering in Computer Science

March 2024
CGPA: 8.5/10.0

SKILLS

Backend: Go, gRPC, WebSockets, REST, GraphQL, PostgreSQL, Redis, Kafka

DevOps: Kubernetes, Docker, Ansible, Terraform, GitHub Actions, AWS

Observability: Grafana, Loki, Tempo, Prometheus, Open Telemetry, Azure Application Insights

Other: OAuth, Firebase, React, Android(Java/Kotlin), Spring Boot

EXPERIENCE

Affordmed Pvt Ltd | Software Engineer (Backend, DevOps)

March 2023 – Present

- Engineered 4 production microservices end-to-end, reducing average API latency by 22–30% through query optimization, caching, and routing improvements.
- Developed a custom message broker with retry + DLQ + ACK mechanisms, cutting message loss incidents from ~3% to <0.2%.
- Improved workflow resilience for PAN/bank/CSV verification pipelines by 25% using worker pools and rate-limited background jobs.
- Automated infra setup (Redis/PostgreSQL/Hydra) using Kubernetes + Helm, reducing environment provisioning time from ~2 hours to 15 minutes.
- Enhanced CI/CD pipelines and self-hosted runners, decreasing deployment time by ~15% and eliminating 100% of manual rollout steps.
- Implemented secure SSO and managed Azure Key Vault-based secret rotation.
- Set up GitHub self-hosted runners inside Kubernetes, saving ~20k INR/month in GitHub Actions compute costs.

PROJECTS

API Gateway as a Service (SaaS)

Personal Project

- Engineered a low-latency API gateway handling 40–60% faster request traversal via Redis caching and concurrency controls, achieving ~10ms proxying time.
- Achieved 99.9% event delivery reliability using Kafka + Redis Streams with fallback queues, circuit breakers, and end-to-end delivery guarantees.
- Built a production-grade, high-availability setup (PostgreSQL repmgr, Redis Sentinel, Kafka replication) with zero-downtime rolling updates and >99.8% uptime.
- Designed a secure JWT + RSA credential flow ensuring zero plaintext credential exposure across all authentication paths.
- Scaled rate-limits, quotas, and metered overage billing to sustain 100k+ requests/day during load testing.

All-in-One Video Downloader

2020 – 2023 Personal OSS

- Reverse-engineered and built a custom scraping pipeline supporting 6+ platforms, with download failures < 5%.
- Developed a fully native Android app using Java and Kotlin as a solo indie developer.
- Gained 90+ GitHub stars from the open-source community.

COMMUNITY CONTRIBUTION

Go-Redis (Open Source Contributor)

- Implemented trace filtering improvements for Redis OpenTelemetry instrumentation.

APKLab (Open Source Contributor)

- Implemented the APK re-assemble and run feature.
- Proposed solutions for bundled APK reverse-engineering support.