# Adarsh Ishwar Hegde

adhegde001@gmail.com | 9113908112 | LINKEDIN | BLOG | GITHUB

BENGALURU, KA

## EXPERIENCE

Saltside Technologies India Pvt Ltd Associate Software Engineer - Backend Sept 2023 - Present Remote, Bengaluru

- <u>Microservices Development:</u> Developed and maintained scalable microservices using **Golang**; utilizing **gRPC** & **Apache Thrift** for inter-service communication and serving traffic via **REST APIs**.
- <u>Email Service</u>: Engineered a high-throughput **email service** with Golang and **Apache Kafka** processing upward of **10,000 emails** per second; via **AWS SES** and **SendGrid**, with robust support for handling failures; directly **saving \$900/month** in operational costs.
- <u>Advertisement Listing using Gen AI</u>: Led the development of the company's first AI-native feature, an end-to-end pipeline to automate ad listings. By leveraging Google Gemini Vision and a RAG model with Qdrant Vector DB, the system replaced a 17-step manual process, enabling users to instantly create accurate, pre-filled ads from user uploaded images.
- <u>Image CDN</u>: Re-architected **NodeJS** based **image service** into **Golang**, allowing for efficient and fast transformations of image assets, utilizing **s3 pre-signed URLs** for efficient uploads.
- <u>Platform team contributions:</u> Optimized Dockerfiles to reduce image sizes and build times for multiple services by implementing multi-stage builds and effective caching. Developed a Golang CLI tool to automate Kubernetes staging environment deployments and commit them directly to the **ArgoCD** Git repository.
- <u>Databases:</u> Improved database performance by **optimizing queries**, **profiling**, and implementing **indexing strategies**, and Redis caching layers.
- <u>Job Scheduler Enhancements:</u> Enhanced the in-house scheduler service (Golang + MongoDB) with **exponential backoff** retries, improving resilience and stability under high load.
- <u>Search Engine Enhancements:</u> Refactored and optimized the **Elasticsearch**-based search service codebase; identified and fixed a critical race condition increasing search API success rate from 40% to over 99% in production.
- <u>JSON-to-gRPC Gateway</u>: Developed a **REST API Gateway** enabling external clients to consume internal gRPC services seamlessly, secured with robust authentication and rate-limiting mechanisms.

#### Recognitions

• Star of the Quarter Awarded twice for contributions during Q2 & Q4 2024

#### Software Engineer Intern

April 2023 - Aug 2023

- Gained proficiency in company's technical stack, contributed to Golang, Ruby, Python and Java services.
- Contributed to migration of legacy web services to ReactJS-based in-house SSR+CSR framework.

## SKILLS

Languages: Go | JavaScript | Python | Java

Backend & DB: gRPC | Protobuf | Restful API | Apache Kafka | Redis | MongoDB | MySQL | DynamoDB

Platform / Cloud: AWS | Docker | CI/CD | Kubernetes | ArgoCD | S3 | SES | RDS | MSK

#### **EDUCATION**

New Horizon College of Engineering | GPA: 8.52 / 9.0

Aug 2023

MCA | Master of Computer Applications

Bengaluru, KA

Bhandarkars' Arts & Science College, Kundapura | GPA: 7.6 / 9.0

Sept 2021

**BCA** | Bachelor of Computer Applications

Udupi, KA