#### SIGURU SAI HARSHITH KUMAR

Hyderabad | +91 8074105572| saiharshithkumarsiguru@gmail.com | https://www.linkedin.com/in/saiharshithkumarsiguru

## **Professional Summary**

Senior Backend Engineer with 4+ years of experience in scalable distributed systems, monolithic, microservices (gRPC), and security. Owner of Jukshio's KYC backend for Jio, managing 300+ TPS & 5M+ daily writes for 10+ enterprise customers. Led monolith-to-microservices migration, security-first architectures, and ML optimizations, ensuring scalability, security, and efficiency. Pursuing M.Tech (CS) at IIT Patna to deepen expertise in backend architecture and distributed systems.

# **SKILLS**

Programming Language: Golang, C#

Frameworks & Tools: Gin, Gorm, PostgreSQL, Redis, RabbitMQ, Git, Docker, Kubernetes, Postman

#### **WORK EXPERIENCE (4 Years 2 months)**

Jukshio Technology Innovation Private Ltd, Hyderabad, Telangana, India | 2022 – 2025 Role: R & D Engineer I | 3 years | Backend Golang | Jio | Platform Owner

# Platform Ownership & High-Scale Processing

- Owner and maintainer of Jukshio's KYC backend for Jio, processing 300+ TPS and 5M+ daily writes across staging, replica, and production environments. Led migration from monolith to microservices (gRPC), improving API response times by 30% and enabling seamless scaling. Solely responsible for all production deployments, security, and system scalability of 10+ enterprise customers.

#### Security, Encryption & Fraud Detection

- Implemented AES-256 & RSA encryption, securing sensitive customer data at every level. Strengthened application security by enforcing strict input validation and image integrity checks.
- Integrated Bayun's security solution, enabling group-based authentication & authorization via facial signatures.
- Designed & deployed a real-time fraud detection system, reducing fraudulent attempts by 20%.

# **Cloud Cost Optimization & Infrastructure Enhancements**

- Reduced cloud costs by 30% by migrating ML workloads from CPU to GPU, improving performance and efficiency.
- Led 90-day storage & database migration from GCP to Azure, ensuring minimal downtime and cost optimization.
- Built a high-performance video processing server for Jio's Self-KYC, improving processing speed by 40%.
- Designed and implemented a CI/CD branching strategy, streamlining development and release cycles.

# **Automation, Testing & Performance Optimization**

- Developed a full automation pipeline for simulation testing, integration tests, and deployment validation.
- Achieved 80% test coverage across all services using gotest and mocking, significantly reducing production failures. Initiated load testing and performance tuning, ensuring system reliability under heavy load.

# **Customer Onboarding & Technical Leadership**

- Onboarded 5+ new customers, setting up the entire platform from development to production. Acted as the final authority on all deployments, overseeing code changes, RCA investigations, sanity checks, and production releases. Managed external customer interactions, new feature planning, and production issue resolution, ensuring seamless operations. Mentored junior engineers, conducting training sessions and fostering a culture of technical excellence.

### Cognizant Technology Solutions, Hyderabad, Telangana, India | 2021 – 2022

### **Role: Programmer Analyst Trainee**

Migrated legacy C++ systems to Python, enhancing maintainability

Migrated Services from .net framework to .net core

#### **EDUCATION**

M.Tech, Computer Science Engineering | IIT PATNA 2024 – 2026

B. Tech, Computer Science Engineering | Malla Reddy Institute of Engineering and Technology 2016–2020