Sarwar Ali

Bengaluru, India | +917071964524
sarwaralisiddiqui@gmail.com

Experience

Knowl.ai | INDIA, Bengaluru
Software Engineer | 09/2024 - Present

- Member of a 3-person engineering team building an enterprise-scale AI-powered call center automation system handling 150K daily borrower interactions matching the capacity of 500 human agents, with system capability to initiate 900K+ outbound calls daily
- Engineered distributed calling system managing 1,500+ concurrent calls using AWS SQS, Redis, and microservices architecture:
  - Reduced call initialization latency by 90% through Redis caching implementation
  - Built fault-tolerant resource management system with automated provider failover
  - Designed asynchronous message queue system with sub-50ms processing times
- Developed automated call quality monitoring system analyzing real-time metrics:
  - Implemented priority-based auditing for LLM, STT, and TTS latency thresholds
  - Created detection system for call disruptions and bot response delays
  - Built analysis pipeline for speech recognition accuracy across multiple languages
- Enhanced system scalability and performance:
  - Implemented metadata processing system with 40 parallel workers
  - Architected background processing using multiprocessing queues
  - Expanded multilingual support (Tamil, Indonesian, English)
  - Scaled system architecture supporting 15 clients with custom workflows
- **Tech stack - Python, FastAPI, PostgreSQL, Redis, Docker, AWS(SQS, S3, EC2)**

Tiffyy | Remote
Contract Software Engineer | 01/2023 - 06/2024

- Architected and developed a full-stack food delivery platform serving 5,000+ users, implementing end-to-end solutions from order processing to delivery tracking.
- Architected, implemented, and deployed backend systems with high availability using redundancy and monitoring practices
- Implemented robust security features including JWT-based authentication, role-based access control, and automated security logging
- Spearheaded the integration of the app with kitchen operations, reducing order processing time by 80%
- **Tech stack - Node.js, Express.js, MongoDB, Redis, NGINX, GIT and Docker.**

Holiday Travel Triangle | India, Gurgaon
Software Engineer | 08/2020 - 08/2021

- Led development of the Travel Triangle Supply Network (TTSN) platform, serving 100+ travel agents
- Developed and maintained RESTful APIs enabling travel agents to manage packages, resulting in 40% increase in package customization options.
- Optimized package pricing through A/B testing implementation, leading to 25% improvement in conversion rates
- Designed and developed an intuitive agent dashboard streamlining hotel and flight reservation processes, significantly reducing booking time.
- Built and maintained a scalable chat service in Go, handling real-time communication for 10K+ daily users.
- **Tech Stack - Django, Python, Go (Golang), PostgreSQL, Redis, Docker, Kafka, Git**

Synaptic | India, Gurgaon
Software Development Intern | 01/2020 - 04/2020

- Optimized Crunchbase data processing pipeline, successfully handling 2GB+ of compressed data with 100% accuracy
- Implemented automated data validation and error detection systems, reducing manual review time by 80 to 90%
- Integrated multiple third-party APIs for real-time data synchronization, improving data freshness by 40% and reducing manual updates.
- **Tech Stack - Django, Python, PostgreSQL, Redis, Git**

Education

Indian Institute of Information Technology | Allahabad, India
Bachelor Of Technology (IT) | 08/2020

Indian Institute of Information Technology | Allahabad, India
Master Of Technology (IT) | 08/2020

Skills

Python, Go, JavaScript, Java, Node.js, FastAPI, Django, Express.js, PostgreSQL, MongoDB, Redis, AWS, Docker, Git, Software Architecture, Data Structure, Algorithm Design, Object Oriented Programming