Shreyas Ramkumar Karthik

shreyasrkms@gmail.com | +18578913488 | linkedin.com/in/shreyas-rk

SUMMARY

Senior Software Engineer with 6+ years building high-scale distributed systems and cloud-native microservices. Expert in event-driven architectures processing 100K+ daily events using Java, Go, and Python on GCP/AWS. Proven track record in system design, DevOps automation, and leading engineering teams across ML and data pipeline initiatives.

WORK EXPERIENCE

PayPal Inc. | SENIOR SOFTWARE ENGINEER   [JAVA, GO, PYTHON, GCP]   Austin, TX | Jan 2023 – Present

- Spearheaded Urbancode Velocity deployment on PayPal's infrastructure, creating automated onboarding via **GKE, GoLang, and GraphQL** that integrated 3,700+ applications, driving 18% throughput improvement.
- Architected **Spring Boot microservices** migration platform using **BigQuery and Cloud Functions**, achieving 400% higher data retention. Implemented event-driven architecture with **Docker & Jenkins CI/CD**.
- Engineered the development of a **distributed event-driven** data pipeline using **Spring and GCP PubSub** for building SPACE and DORA frameworks. Integrated **BigQuery and Google Cloud Storage**, leading to a **7%** increase in team productivity and enabling more strategic, data-driven decision-making processes.
- Developed distributed session management system using **Redis Sorted Sets and GoLang** enforcing concurrent license limits (1000/30K users) with 99.9% availability implementing token bucket algorithm while maintaining low latency during peak loads.
- Pioneered the development of a **RAG (Retreival Augmented Generation)**-based conversational AI chat-bot, utilizing **Python and GPT3.5** with advanced vector database encoding, which improved response rate by **70%**, setting a new standard in AI-driven developer interactions.
- Mentored engineers and interns on technical tasks and collaborated with Data Scientists and Product Managers to ensure successful project delivery in an agile environment.

Vymo Technologies Pvt. Ltd. | SENIOR MEMBER OF TECHNICAL STAFF   Bengaluru, India | May 2019 – Aug 2021

- Implemented a **distributed, microservices**-based ML system with **AWS Lambda, Kafka, and Elasticsearch**, reducing lead TAT (Turn Around Time) by **20% and aiding 80,000** agents, using **pySpark and Sklearn** for predictive modeling.
- Engineered a scalable, distributed **REST APIs with Java and Kafka** based system, slashing report generation time by **60%** by transforming unstructured **DynamoDB** data into structured insights in **Amazon RDS**.
- Managed a team of engineers and data analysts in a cross-functional collaboration with product managers, integrating Machine Learning into development to expedite sales and advance strategic goals.

Ittiam Systems Pvt. Ltd. | SOFTWARE ENGINEER   Bengaluru, India | Aug 2017 - May 2019

- Achieved **30%** faster video processing with a microservices-based backend in **Java Spring Boot on Google Kubernetes Engine (GKE)**, ensuring real-time analysis of video feeds for physical retail outlets.
- Improved data access by **40%** through secure and efficient storage solutions using **Google Cloud SQL and Firestore**, enhancing data management for streamlined analytics on GCP.
- Established robust error handling, logging via **Google Cloud Logging**, and effective monitoring strategies using Google Cloud Monitoring, resulting in a highly stable and reliable backend system.

EDUCATION

Northeastern University   Boston, MA | Graduated 2022
M.S. IN COMPUTER SCIENCE (GPA: 4.0/4.0)

PES University   Bengaluru, India | Graduated 2017
B.E. INFORMATION SCIENCE AND ENGINEERING (GPA: 4.0/4.0)

TECHNICAL SKILLS

Languages and Databases: **Java, Python, GoLang**, JavaScript, C++; **MySQL, MongoDB**, ElasticSearch, PostgreSQL, OracleDB
Skills: **Backend Development, Microservices, Object-oriented Design,** Machine Learning, Scrum Framework, Spring Planning
Cloud Technologies: **GCP**: Cloud Functions, Cloud Run, Cloud Storage, BigQuery, Datastore; **AWS**: EC2, S3, Lambda, RDS, DynamoDB
Machine Learning: scikit-learn, Spark, Pandas, pyTorch, LLMs, NLP, Matplotlib
Tools: Git, Spring Boot, JUnit, Mockito, Gradle, GoTest, GoRoutines, Docker, Jenkins, Kubernetes