

RAHUL N R

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PROFESSIONAL SUMMARY

High-impact Senior SRE with **7+ years of experience** transitioning from legacy systems to **Cloud-Native Observability & Automation**. Expert in architecting **Fault-Tolerant Distributed Systems** and building **Internal Developer Platforms (IDP)** using **Python, Kubernetes, and Docker**. Successfully reduced MTTR by **40%** through automated root-cause analysis tooling. Passionate about **Applied AI Engineering**, building RAG-based assistants to streamline developer onboarding and operational workflows.

TECHNICAL SKILLS

- **Core SRE & DevOps:** Kubernetes (K8s), Docker, Terraform (IaC), CI/CD (GitHub Actions), Linux Internals.
- **Automation & Scripting:** Python (Advanced - Multiprocessing/AsyncIO), Bash Shell Scripting.
- **Observability & Logging:** ELK Stack (Elasticsearch, Logstash, Kibana), Prometheus, Grafana, Distributed Tracing.
- **Data & Messaging:** Redis (Queue/Caching), Kafka (Basics), SQL, Mainframe (Legacy Data Processing).
- **AI/ML Engineering:** RAG Pipelines, LLM Integration (Gemini/OpenAI APIs), Vector Databases.

KEY PROJECTS (Architecture & System Design)

LogSentinel: Distributed Fault-Tolerant Log Ingestion System (*Self-Hosted / Open Source*)

- **Architecture:** Designed an event-driven microservices architecture to decouple log generation from processing using **Docker** and **Redis Queues**.
- **Scalability:** Implemented **Horizontal Pod Autoscaling** strategy, enabling the system to handle high-concurrency log traffic with zero data loss during simulated crashes.
- **Resilience:** Built a **Self-Healing Consumer** service in Python that automatically recovers from failures and processes critical alerts in real-time.
- **Tech Stack:** Python, Docker Compose, Redis, REST APIs.

Project COSMOS: AI-Powered Internal Developer Platform (IDP)

- **Innovation:** Developed a **RAG-based AI Assistant** to analyse legacy codebases and generate automated documentation, reducing developer onboarding time by **60%**.
- **Optimization:** Utilized **Python Multiprocessing** to parse large-scale repositories efficiently, integrating **LLMs (Gemini)** for semantic code understanding.
- **Impact:** Designed to solve the "Knowledge Silo" problem in large enterprises by making legacy code searchable and understandable via natural language.

PROFESSIONAL EXPERIENCE

Infosys Ltd. | Chennai, India Consultant (Automation & Reliability Engineering) | Jan 2022 – Present

- **Reliability Engineering:** Managed critical infrastructure for a major Telecom Client, ensuring **99.9% availability** for storage and compute resources across 50+ Unix instances.
- **Automation & Tooling:** Architected a **Python-based Log Analysis Framework** that automated the parsing of 1M+ daily log lines, reducing manual toil by **90%** and saving **20+ engineering hours/week**.
- **Incident Management:** Led High-Severity (P1) Root Cause Analysis (RCA) calls; developed automated scripts to detect "Storage Bottlenecks" proactively, preventing production outages.
- **Legacy Modernization:** Developed validation scripts to identify schema mismatches during data migration, ensuring data integrity for millions of subscriber records.

Infosys Ltd. | Chennai, India Systems Engineer (Mainframe & Backend Operations) | Dec 2018 – Dec 2021

- **Production Support:** Maintained mission-critical Mainframe applications processing Terabytes of data daily; handled incident response and defect resolution under strict SLAs.
 - **Process Improvement:** Developed Python scripts to generate automated reports from raw Mainframe dumps, eliminating manual spreadsheet work and improving data accessibility for stakeholders.
 - **System Stability:** Monitored batch jobs and transaction processing systems, ensuring seamless operations for high-volume subscriber data.
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EDUCATION

- **B.Tech, Computer Science** | Dr. M.G.R. Educational and Research Institute | 2018
- **Master of Business Administration (HR)** | SRM Institute of Science and Technology | Pursuing (2025-2027)

CERTIFICATIONS

- Infosys Certified Python Programmer
- Google Cloud Computing Foundations