Ravi Gyani

Munich, DE

GitHub | Blog | LinkedIn | rgyani@yahoo.com | (+49) 151.202.87955

Quick Summary

- 20+ years in software engineering, specializing in **Cloud Computing**, **Serverless solutions** and Big Data.
- Reputed as a **Problem Solver**, bringing out-of-box approaches to system design
- Focused on **optimizing performance** and designing **cost-effective** architectures.
- Advocate for validating ideas via **proof-of-concepts** (POCs).
- Firm believer that knowledge shared is knowledge squared.

Technologies

- **AWS Expertise:** IAM, EC2, S3, Lambda, Step Functions, Batch, API Gateway, AppSync, DynamoDB, IoT, EventBridge, CloudWatch, RDS, Aurora, Redshift, Glue, Athena, ECS, Elastic Beanstalk, CloudFront, Route 53, ECR, EMR, Kinesis, Greengrass and more.
- **Infrastructure-as-Code** : Docker, CDK, Terraform, CloudFormation
- **Big Data:** Hadoop Ecosystem, HBase, Kafka, Spark, Cassandra, Redis
- **Programming Languages:** Python, Java, TypeScript, Go, Node.js

Certifications

- AWS Certified Security Specialty (SCS-C01) - Mar 2023
- **AWS Certified Solutions Architect Professional (SAP-C01)** - Oct 2020
- AWS Certified Solutions Architect Associate (SAP-C02) – Oct 2020
- Databricks Certified Developer: Apache Spark 2.X – Jul 2019
- Confluent Certified Developer for Apache Kafka – Jul 2019

Education

Bachelors of Engineering (Netaji Subhas Institute of Technology, Delhi) 1999-2003

Awards

Received Top-Performer Awards multiple times throughout my career

Career Highlights

- Replaced Legacy Product with National-Scale Big Data Platform

- Took ownership of a failing SQL Server-based location tracking system.
- Built a custom big data platform from scratch using Hadoop, HBase, Kafka, and Spark
- Delivered real-time subscriber profiling for national security use. Scaled ingestion and analytics across billions of location records.

- Slashed Cloud Compute Costs by 90%

- Inherited an inefficient batch-processing workflow bleeding money.
- Re-architected it using Step Functions, Batch, Spot Instances, and S3 runtime mounts.
- Cut compute costs by 90%, while improving reliability and scalability.

- Automated AMI Generation: 1 Day to 5 Minutes

- Manual AMI builds for a proprietary Windows workload were blocking delivery.
- Designed a fully automated AMI pipeline using Step Functions and SSM.
- Reduced provisioning time from a full day to 15 minutes, freeing up engineers for actual development.

- Built Real-Time ML Pipeline for Automotive Fault Detection

- Migrated legacy ML pipeline from GCP to AWS.
- Designed a distributed pipeline using IoT Core, ECS, and Greengrass to process edge telemetry from vehicles.
- Enabled real-time fault classification and alerting at fleet scale.

- Created Custom Developer Tooling When Nothing Off-the-Shelf Worked

- Wrote a Grafana plugin in Go + Angular to integrate with MapR clusters.
- Built a custom Zeppelin interpreter to bridge Git workflows.
- Eliminated bottlenecks, made big data workflows dev-friendly, and shipped what vendors couldn't

- Built Serverless In-Vehicle Support Platform

- Designed a secure, real-time support system using AppSync, Chime, and Cognito for OEM vehicle systems.
- Enabled live diagnostic support directly from vehicle dashboards with no server maintenance overhead.

- Steered Architecture for High-Stakes Clients: BMW, VW, Amazon, Continental

- Reviewed architectures, built POCs, and led technical direction across multiple clients.
- Replaced brittle systems with scalable, observable, secure solutions.

- Took Over Projects Others Dropped — and Delivered

- Whether it was rewriting pipelines, designing RBAC from Cognito internals, or refactoring critical services, delivered results where others got stuck.
- Reputed for "gets-it-done" in every client engagement.

- Took a 6-Month Sabbatical to Pursue Indie Game Development

- Took time off in 2024 to explore solo game development using the Godot engine.
- Designed and built multiple game prototypes, tackled real-time performance bottlenecks, and sharpened cross-disciplinary skills.
- Though not commercially successful, the experience deepened my systems thinking and performance-tuning mindset.

Work Experience

Senior Solutions Architect at Luxoft GmbH, Munich, Jan 2021 – July 2024
Consulted with clients including Amazon, BMW, Volkswagen, and Continental. Led cloud migrations, cost optimizations, and PoC architecture efforts. Mentored engineers and led internal training on CDK, Terraform, and serverless.

Solutions Architect — Polaris Wireless, Bangalore (Feb 2014 – Aug 2020)
Architected a scalable location analytics platform for national security use. Led big data transformation from SQL Server to Hadoop, HBase, Spark. Delivered patent-pending profiling system.

Software Engineer & Entrepreneur — Various / KNOCKS Solutions (2003 – 2014)
Worked across mobile (iOS/Android), .NET WinForms, and C# development.
Founded KNOCKS Solutions (2006–2009) and built a commercial UI components suite with features like Outlook-style calendars, docking controls, and ribbon interfaces.