

# Ravi Gyani

Munich, DE

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## 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 HDFS, MapReduce, HBase, Kafka, Flink, Spark, Redis
- **Programming Languages:** Python, Java

## 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

**Bachelor 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.
- Developed a patented system for real-time subscriber profiling and location estimation (US20230050646A1), enabling scalable analytics for national security applications.

### **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 .NET Winforms UI components suite with features like Outlook-style calendars, Visual Studio-style docking controls, and Office 2007- style ribbon interfaces.