

SATHISH KUMAR RENGANATHAN

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Iselin, NJ, 08830, USA

Professional Summary:

- Certified AWS Cloud Solution Architect & Big Data Specialty with over 10 years of experience specializing in serverless computing, cloud migration, and real-time threat detection.
- Proven track record of reducing operational costs through strategic cloud-to-cloud migrations and implementing robust disaster recovery solutions that ensure high availability and fault tolerance.
- Specializing in Golang, AWS DevOps, MongoDB, and Elasticsearch, with hands-on experience designing cloud-native microservices and CI/CD pipelines. I've deployed scalable services using EKS/Fargate & Azure AKS automated IaC with Terraform, and optimized search/data pipelines for performance.
- Skilled in Observability engineering - SRE, incident management, performance tuning, automation, and service-level governance across cloud-native, microservice, and hybrid infrastructures using Datadog, Elasticsearch (ELK Stack), and Dynatrace.

Technical Skills:

Real-Time Threat Detection

SRE, Dynatrace, ELK, Datadog

Containerization

Payment Gateways

API Development

Cloud Cost Management

Cloud Migration

Continuous Learning

Governance Policies

Security Solution Design

Serverless Computing

Golang-GraphQL

AWS EKS,ECS/Azure AKS

DevOps & IaC tools

CI/CD Pipelines

Event Driven Architecture

Agile Methodologies

NiFi ETL

Certification(s):

- AWS Certified Big Data – Specialty - 2019
- AWS Certified Solution Architect (Associate) – 2018
- Salesforce.com - Platform Developer I (DEV 501) - 2016
- Salesforce.com Administrator (ADM 201) - 2016
- Microsoft Dynamics CRM Application (MCP) - 2016

LinkedIn - <https://www.linkedin.com/in/sathish-kumar-renganathan-03371890/>

Educational Qualification

- Master of Computer Applications, Bharathidasan University, India
- B. Sc (Geology) [Gold Medalist], Bharathidasan University, India



Professional Experience:

TOYOTA MOTORS, PLANO, TEXAS, USA

Nov 2019 – Sep 2025

Cloud Architect, Golang Fullstack, DBA (MongoDB, Aurora Postgres)

Roles & Responsibilities:

- Designed and deployed multi-region MongoDB Atlas clusters with replica sets and sharded configurations for horizontal scalability and resilience. Automated cluster provisioning, backup, and restore workflows using Terraform + Atlas API integrations.
- Configured VPC peering, PrivateLink, and IP whitelisting for secure cloud connectivity between application VPCs and Atlas clusters. Implemented Atlas Data Federation to query data across S3, Atlas, and on-prem collections for hybrid analytics use cases.
- Enforced organization-wide security controls — IP access lists, role-based access control (RBAC), and encryption in transit and at rest (FIPS 140-2). Configured Database Auditing and Organization Activity Feed for compliance tracking (SOC2, GDPR). Automated user lifecycle management and key rotation using Atlas Admin API + Vault integration.
- Tuned indexes, connection pools, and wiredTiger cache settings based on Atlas Performance Advisor recommendations. Used Atlas Profiler and Query Explain Plans to identify slow queries and optimize aggregation pipelines.
- Implemented auto-failover testing playbooks simulating region outages to validate cluster resiliency. Implemented real-time change data capture (CDC) using Atlas Triggers + Kafka Connect + AWS Lambda to propagate changes into analytics pipelines. Used MongoDB Atlas Data Lake and Federated Queries to combine structured/unstructured data from S3 for near-real-time analytics.
- Implemented end-to-end monitoring with Dynatrace OneAgent and ActiveGate for EKS workloads. Automated problem detection and RCA using Davis AI with Slack & PagerDuty integration.
- Developed synthetic tests for business-critical APIs and integrated results into CI/CD quality gates. Used Dynatrace APIs for custom dashboard automation and performance regression detection.
- Designed end-to-end observability stacks integrating Prometheus, Grafana, ELK, and Datadog for metrics, logs, and traces. Implemented synthetic monitoring + real-user telemetry to detect outages proactively. Developed alert routing strategy (XMatter / PagerDuty) with deduplication and escalation paths.
- Conducted profiling, stress testing, and latency SLAs for mission-critical APIs. Used Flame graphs, Datadog Profiler, and pgbadger for end-to-end performance visibility. Established capacity forecasting models based on historical metrics and seasonal traffic.
- Designed and implemented an end-to-end ETL pipeline using AWS Glue to extract raw data from DB2, S3, transform it using PySpark, and load curated datasets into Snowflake.
- Configured Snowflake external stages and Snowpipe for continuous ingestion from S3. Optimized ETL performance by tuning partitioning, Spark parallelism, and Snowflake warehouse sizing. Automated pipeline orchestration using AWS Step Functions and integrated data validation checks with Lambda. Enabled data lineage tracking and cost optimization by implementing Glue Job bookmarks and incremental loads.
- Built a full stack application (Active Vehicle Mapping) using Golang for the backend and React for the frontend, deployed on AWS ECS. Designed secure REST APIs with JWT auth, used MongoDB, Postgres + Redis for persistence, and set up CI/CD pipelines with GitLab. Integrated token-based authentication using keycloak and real-time updates via WebSockets. The result was a system that scaled to 50k concurrent users with zero downtime and 40% faster response times.
- Integrated Neo4J Graph database for Network, resource mapping with Golang Microservices
- Automating the Infrastructure deployments using Terraform for ECS, EKS and automating the Organization account creation using AFT Control Tower and regulating SCP policies, Guardrails preventive and detective rules



Roles & Responsibilities:

- Designing and developing highly available and cost-efficient microservice applications, Serverless architecture and integrating with Jenkins CICD Agile delivery.
- Rearchitecting the Logstash implementation of data ingestion to **Go Service** model with cloud native approach with ELK stack
- Decoupling the Logstash pipelines with **RabbitMQ messaging** queues for asynchronous CIN Submission work flows and populating the Elastic indices data as batch manner via platform independent **Go routine** micro Services. (Bi Directional gRPC streams services)
- Customizing data ingestion Beat services using Golang and integrating with unsupervised **machine learning for anomaly detection** and alerting services (Artificial intelligence) and integrating with **Prometheus** system
- On demand multi-node **Elastic Cluster** creation using **Ansible Playbooks** (HOT, WARM, COLD Data nodes – 12+) with **Minio** Snapshot archival setup
- Customizing the plugins for ELK stack to tailor the Security Incident reporting, Threat hunting and Threat assessment
- Preparing timelion and stunning dashboards using huge petabyte of historical data for Business analytics and trend
- Rearchitecting the REST APIs to **gRPC** based stream services for custom agent data retrieval and Data pipelines
- Developing Go REST API modules to gather data from CyFIR Services (CIN and CyFIR Servers) for enhanced data ingestion to ELK stack
- Adopting Agile (Scrum framework) project methodology in managing the processes towards project development
- Implementing automation frameworks on testing and integrating with development pipeline
- Responsible for system, regression testing, automation framework designs, implementing automations, and reviewing estimations for entire end to end testing phases.
- Responsible for Cloud implementation projects by organizing, managing, and monitoring resources, methods, and technologies throughout the project lifecycle.
- Preparing Data modeling and various BI analytical reports using Salesforce, Power BI, Tableau
- Establishing Quality Procedure for the team and continuously monitor and audit to ensure team meets quality goals.

Roles & Responsibilities:

- Cloud Solution Manager & SWAT Lead for **SD-WAN** AT&T NoD Product
- Expertise in SD-WAN Product and resolving technical flow issues & guiding system engineers for the new requirements.
- Leading SD-WAN team and accomplished almost 4500+ **SDWAN** Orders for State Farm Customers on real time flow.
- Conducting Daily Scrum meetings and delivering the committed sprints within the schedule and making sure cross overlap sprints diligently.
- Customizing JIRA Kanban boards with additional plugins (using JQL) and Presenting across to Leadership team to make the successful release for the critical sprints
- Integrating Salesforce with AWS S3 for archival storage using secured private VPC endpoint



- Responsible for generating various analytical reports & Dashboards for the AT&T Production system for the Business improvements
- Integrated AWS Connect IVR system with Lex Bot services for Production users to handle service requests
- Migrated large scale Windows (2003, 2008*), *UNIX Servers and associated Data center applications to AWS cloud including server upgrade
- Skilled in ELK Stack (Elastic Search with Kibana analytical tool and Logstash data ingestion tool) & integration with Drupal Framework
- Expertise in Spring Boot application integration with AWS Beanstalk for microservice based application development
- Customized the Network/Server monitoring tool using Zabbix for various analytics reports
- Integrating Apache Big Data tools for custom analytics (**Zeppelin using AWS EMR**)
- Implemented the scalable complex analytical tasks using AWS Lambda, API GW integration with GO packages
- Automated the reporting Dashboard tool using Salesforce, Power BI - and ELK Stack (Machine learning and Alerting specialist)
- Integration specialist between AWS ECS and other AWS services – EMR, Redshift, IAM, Auto Scaling, ELB, EC2 container registry, Cloud Formation, Cloud Watch, CICD pipeline using Jenkins for Microservices
- Designing a highly available and cost-efficient Microservices application using AWS
- Involved in Data cleaning, Data reconciliation during migration.
- Involved in Webinars, training sales persons how to use the application.
- Translate customer requirements into formal requirements and design documents, establish specific solutions, and leading the efforts including programming and testing that culminate in client acceptance of the results.
- Establish Quality Procedure for the team and continuously monitor and audit to ensure team meets quality goals.

Environment: SDWAN eComp System, ONAP, AWS ECS, EMR, Go with Lambda, Angular JS, Redshift, IAM, Kinesis, Auto Scaling, ELB, EC2 container registry, CICD pipeline using Jenkins, Java, ELK, Eclipse, Salesforce with AWS S3

IBM - AT&T Middletown, NJ, USA

Tech Lead

May 2009 - Oct 2013

Responsibilities:

- Responsible for managing scope, planning, tracking, change control, aspects of the project.
- Responsible for preparing MTP, HLTS, fund Estimation and work allocation based on complexity and severity.
- Responsible for effective communication between the project team and the customer. Provide day to day direction to the project team and regular project status to the customer.
- Translate customer requirements into formal requirements and design documents, establish specific solutions, and leading the efforts including programming and testing that culminate in client acceptance of the results.
- Establish Quality Procedure for the team and continuously monitor and audit to ensure team meets quality goals.
- Key projects handled so far include ASAP/FMO and BVoIP an CPE Resale projects.
- Created Data Validation rules and Formulas as per business requirement.
- Worked with various salesforce.com Standard objects like Accounts, Contacts, Leads, Cases, Reports, and Dashboards.
- Packaged and Deployed customizations from Sandbox to other environments.
- Designed, developed and deployed Apex classes, Controller classes, Apex triggers for various functional needs in the application.
- Generated different kinds of reports and Dashboards as per the user's requirements.
- Created different workflow rules and approval processes for custom objects



IBM - Nortel Ottawa, Canada
Senior Technical Staff and Test Lead

Jun 2008 - May 2009

Roles & Responsibilities:

- Leaded the Nortel VSE ATCA product V4 to V6 migration Development and its test executions
- Responsible for 13U VSE loads Sanity test executions. Leaded VSE Tools creation, automating the test executions.
- Exploring the security enhancements – OSPF, IPSec (L2TP, SSAT tunnels).
- Device Load balancing/High Availability using keepalived / conntrackd protocols.
- Responsible for leading a project team in delivering solution to our customer in the AT&T sector.
- In charge for Setting up test environment and test bed comprising secured network zones LAN/WAN/DMZ for vulnerability, development testing.
- Guiding Apache, MODx Module development for web services, SSL, Netfilter firewall implementation & IPv6 porting conversion.
- Report Generation & data sharing with System Engineers, Development team
- Involved in gathering business and technical requirements for Sales Portal home page and build the application right from the scratch and deploy it to production.
- Coordinated and communicated tasks with developers & testing teams
- Ensuring that development is performed as per requirements
- Translate customer requirements into formal requirements and design documents, establish specific solutions, and leading the efforts including programming and testing that culminate in client acceptance of the results.
- Establish Quality Procedure for the team and continuously monitor and audit to ensure team meets quality goals.

Environment: ATCA Platform, VSE Product, Security Controls, HTML, Java Script, Web Services, WSDL, Sandbox, Eclipse IDE Plug-in

Global Security One (GSEC1), UK - Chennai
Senior Member Technical Staff

Aug 2004 - April 2008

Responsibilities:

- Design, implementation and delivery in-charge of core modules for the management layer (firewall, network management and Bandwidth Management).
- Enhanced multiple public IP support in the Prodigy device (ProxyARP) using net filter's iptable.
- Worked with Business Analyst in translating business requirements into Functional Requirements & Documented to Detailed Design Documents.
- Coordinated and communicated tasks with developers & testing teams
- Ensuring that development is performed as per requirements
- Developed Java plugins for UI integration with Prodigy device.
- Worked with QA to create test scripts and scenarios for enhancements and customizations to the core product
- VoIP - Asterisk Server implementation in intranetworking and its GUI development
- Developed gSOAP GUI interface for the device management interface (Web 2.0) enabled
- Communicate activities/progress to project managers, business development, business analysts and clients

Compugra Systems, Hyderabad, India
Technical Lead

Nov 2003 - May 2004

Responsibilities:



- As Technical lead, responsible for an Application Service Provider (ASP) based portal Conrep, which provides services for Consulting Organizations
- Developed the modules of the project include Client management, Employee management, placement handling, recruitment processing, hot list management, HR management etc.
- The features include automated invoice generation based on timesheets for consultants on placement, customizable alerts, roles
- Coordinated and communicated tasks with developers & testing teams
- Ensuring that development is performed as per requirements

Esen Web Technologies, India
Technical Lead

Jul 2002 - Oct 2003

Responsibilities:

- Developed a Sales team evaluation application, which helped to measure Company's yearly growth, Sales Target and achievement level & other necessary details.
- This project acts as a Decision Support System to the management & facilitates to generate reports with all kinds of properties like, Slice-Dice (Drill down & Drill up, around), Calculation Intensive Capabilities and Ranking.
- This project helps you to send SMS to representatives instantly.

Dalmia Cements, India
Software Engineer

Dec 2000 - Feb 2002

Responsibilities:

- Developed a Visual TNA pro Package (Training Package) for RTC Training Department for educating Cement Industry employees.
- The application used to evaluate the performance of Cement plant workers and executives. By calculating the key performance indicators, the relevant training courses are categorized and assigned to those employees by HR department.
- Responsible for Development and security testing activities.
- Installing the development environment – Apache, PHP on Linux and test bed preparation.

Top 3 Clifton Strengths

Analytical — Highly data-driven decision maker who identifies patterns and root causes through metrics, logs, and observability tools (Datadog, Elasticsearch, Dynatrace). Excels at using evidence-based insight to improve system reliability and performance.

Learner — Passionate about continuous improvement and mastering new technologies across cloud, monitoring, and automation stacks. Quickly adapts to evolving platforms like AWS, Kubernetes, and MongoDB Atlas to drive operational excellence.

Responsibility — Demonstrates strong ownership and accountability for service uptime, SLAs, and incident resolution. Ensures reliability objectives are met through disciplined follow-through and proactive communication during critical events.

