

Mohana Saravanan's CV

Senior Software Engineer

Contact Information

Name: Mohana Saravanan Kumaresan

Phone: +91-7708299009

Email: mohanasaravanankumaresan@gmail.com **Location:** Chennai, India

LinkedIn: www.linkedin.com/in/mohana-saravanan-kumaresan-5134aa197

Official Portfolio: mohanasaravanan.in

Professional Summary

Senior Software Engineer with 5+ years of experience in **Java Spring Boot, GoLang, and AWS** cloud-native development. Proven track record of delivering over **\$2M** in client value through automation, modernization, and efficiency improvements. Skilled in designing secure, scalable microservices, REST APIs, and DevSecOps pipelines on AWS. Adept at cross-functional collaboration, leading client-focused initiatives, and driving innovation in multi-vendor environments.

Key Skills

- **Programming & Frameworks:** Java (Spring Boot), GoLang, PL/I, JCL, Shell
 - **Cloud:** AWS (Lambda, EKS, IAM, KMS, SQS, CloudWatch), Terraform, Docker, Helm, Kubernetes
 - **Microservices & Architecture:** REST API design, Event-driven systems (Kafka, SQS, StepFunctions), Serverless architectures, Domain-Driven Design (DDD)
 - **Security & DevSecOps:** Secrets Manager, API Security, Compliance automation, Secure coding practices
 - **Monitoring & Observability:** Splunk, ELK Stack, Datadog, Prometheus, Grafana — log tracing, SLO/ SLA monitoring, performance tuning
 - **Databases & Data Handling:** SQL/NoSQL databases (PostgreSQL, DynamoDB), data modelling and integration
 - **Emerging Tech:** AI/ML integration, Generative AI (AWS AI services, MLOps basics), automation using intelligent tooling.
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Education

B.Sc. in Computing & Design – BITS Pilani (Work Integrated Learning Program)
Graduated: 2025 | Completed alongside full-time employment at HCLTech

Key Achievements

- Delivered \$0.5M in client value by automating Docker image upgrades within CI/CD pipelines, significantly reducing manual intervention, eliminating version drift, and improving deployment reliability across multiple environments.
 - Generated \$0.7M in value by integrating SAR (Service Access Representation) and AAR (API Access Representation) into a combined z/OS REST implementation, simplifying API access and reducing duplication of effort.
 - Achieved \$0.4M in efficiency gains by developing internal testing tools that streamlined functional and integration testing, enabling faster validation cycles and easier adoption for new developers.
 - **Boosted developer productivity** by integrating **GitHub Copilot Chat AI** into test automation workflows, enabling intelligent test case generation, faster debugging, and automated code suggestions that reduced manual effort and improved test coverage.
 - Improved client delivery worth \$0.4M by creating additional Gradle Spotless scripts for automated code formatting and verification, ensuring consistent coding standards across teams and minimizing review overhead.
 - Recognized with USAA 'Excellence Award' and '4ward Award' for innovation and efficiency improvements in secure application development consistently.
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Professional Experience

HCLTech (Client: USAA)

Technical Lead | Jul 2019 – Present

- Designed and implemented **Spring Boot microservices** to replace legacy Java monoliths and mainframe based interconnected services, improving modularity and reducing deployment overhead.
- Developed multiple **RESTful APIs** in Spring Boot for high-volume financial applications, achieving improved performance, scalability, and maintainability.
- Improved API performance by implementing asynchronous event-driven messaging (**Kafka/SQS**), and database optimization techniques.
- Implemented **Swagger/OpenAPI** for REST API documentation and Postman collections for automated testing, streamlining client integration.
- Implemented unit and integration testing for Spring Boot microservices using JUnit 5 and Mockito, ensuring high-quality, reliable code delivery.
- Applied **PIT mutation testing** to validate test effectiveness, achieving in both **100%** unit test coverage and strong mutation coverage across critical services.

- Developed automated test suites (**JUnit + Mockito**) that reduced regression testing time by 40% and improved confidence in production deployments.
 - Integrated test coverage reporting (**JaCoCo, SonarQube**) into CI/CD pipelines, enforcing quality gates and maintaining 100% code coverage.
 - Conducted mock-driven testing for REST APIs, simulating external dependencies with Mockito and **WireMock** to ensure consistent test results.
 - Applied design patterns and **domain-driven design (DDD)** principles in microservices development, enhancing maintainability and reducing technical debt.
 - Worked in **multi-vendor environments**, coordinating with cross-functional teams, external partners, and stakeholders to deliver integrated enterprise solutions.
 - Took ownership of **client-facing initiatives**, presenting technical solutions, gathering requirements, and ensuring alignment with business goals.
 - Provided **mentorship and knowledge-sharing sessions** to junior developers, fostering technical growth and improving team productivity.
 - Collaborated in Agile environment with **cross-functional teams**, conducting code reviews, **sprint planning**, and **backlog grooming** to ensure high-quality deliverables.
 - Leveraged flexibility to **switch between Java and GoLang development tasks in the same sprint**, aligning with evolving project priorities and accelerating delivery.
 - **Designed and implemented microservices in GoLang** using AWS Lambda, enabling lightweight, event-driven serverless applications with low latency.
 - Participated in secure **CI/CD** pipeline creation, management and automation by integrating **SAST, DAST** scans, TF validators and automated test cases.
 - Automated infrastructure provisioning and compliance by using **Terraform** and AWS CloudFormation
 - Implemented monitoring solutions using **Datadog, Splunk, ELK Elastic Search**
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Certifications

Workato Pro 2 Certified (2021)

AWS Certified Cloud Practitioner (2022)

Agile SAFe Practitioner (2024)

AWS Certified Developer – Associate (2024)

AWS Certified AI Practitioner (2025)

Guidewire Associate Developer- Upgraded to Kurfi (2025)