

# SURAJ RAGHU KUMAR

Cary, NC 27519 • (919) 637-0471 • [surajrk.rt@gmail.com](mailto:surajrk.rt@gmail.com) • <https://www.linkedin.com/in/rsuryan/>

SOFTWARE DEVELOPMENT ENGINEER | FULL-STACK DEVELOPER | JAVA, SPRING BOOT, AWS

Java / J2EE Developer | 2.5+ Years of Experience in Spring Boot, REST APIs, AWS, and Apache Kafka for Scalable Event-Driven Applications.

## CORE EXPERTISE

Full-Stack Development (Backend & Frontend) | Debugging & Performance Tuning | Cloud Computing | Microservices Architecture & Deployment | Software Designs | AWS Cloud Architecture | CI/CD Pipelines | REST API Development | Data Structures & Internal Systems Design | Database Management | Real Time Monitoring | Agile Software Development | Scalable System Architecture | Service Management | API Troubleshooting & Integration | Technical Documentation | Root Cause Analysis

### Technical Skills:

**Languages and Tools:** Java, C++, Python, JavaScript, TypeScript, SQL, JIRA, Docker, Kubernetes, GitHub, ServiceNow | **Java Frameworks:** Spring Boot, Spring Core, Spring Security, Spring Data JPA, Spring Kafka, Hibernate, OAuth2.0 | **Web & APIs:** HTML5, CSS3, XML, JSON, RESTful API, React.js, Angular, Node.js, Express.js, Tailwind CSS, Django, Flask, Python Tkinter | **Databases:** PostgreSQL, MySQL, MongoDB, DB2, MariaDB, Google Firebase, SAP HANA | **AWS Services:** EKS, ECS, ECR, EC2, S3, Lambda, CloudFormation, API Gateway, IAM, CloudWatch | **DevOps & Build Tools:** Maven, Jenkins, GitHub Actions | **Project Management & Methodologies:** JIRA, ServiceNow, Agile, Scrum, SDLC, Design Patterns (Singleton, Factory, Builder, MVC, Observer) | **Testing Tools:** JUnit, Mockito, PostMan | **Operating Systems:** Windows, Linux, macOS

## PROFESSIONAL EXPERIENCE

SOFTWARE ENGINEER - JAVA | SAP - BENGALURU, KARNATAKA, INDIA

JAN 2021 - JULY 2023

Designed and deployed **Java Spring Boot** microservices for Business Partner, Customer and Vendor modules of SAP with REST APIs secured with **Spring Security JWT** and **OAuth2.0** framework to handle real-time data processing, reconciliation, and analytics.

- Engineered a robust database persistence layer with **Spring Data JPA** and **Hibernate** for efficient interactions and persistence with **PostgreSQL** Database.
- Applied **Spring AOP** to profile and monitor REST APIs, identifying bottlenecks and optimizing service methods, which reduced average response times from ~500ms to ~400ms.
- Authored high-quality, secure, and maintainable code utilizing advanced Java features such as multi-threading, Stream APIs, and lambda expressions to efficiently process business data events.
- Designed and deployed **Kafka** consumer services to process over 50K+ real-time events per day from SAP ERP and S/4 HANA systems, achieving 99.9% processing reliability and fault tolerance.
- Implemented CI/CD pipelines using **Jenkins** and **Maven** for builds, **Docker** for containerization, pushed images to **Amazon ECR**, deployed Spring Boot microservices on **Amazon EKS**, streamlined release cycles.
- Practiced test-driven development with **JUnit** and **Mockito** achieving 85%+ unit test coverage, while actively collaborating with production support team to debug and resolve critical incidents, ensuring system reliability.

SOFTWARE DEVELOPMENT INTERN - JAVA | TEQUED LABS - BENGALURU, KARNATAKA, INDIA

JULY 2019 – AUGUST 2019

Developed full-stack Android applications in Android Studio, implementing backend logic in Java and frontend UI in XML while integrating NoSQL databases (**Firebase** Realtime Database, **MongoDB**) for real-time data synchronization.

- Optimized the “ShopEase” Android app using efficient Java collections and indexing to cut search times by 30% and implemented CI/CD pipelines with **Jenkins** to automate builds, tests and deployment, accelerating release cycles.

## KEY PROJECTS

**Microservices Transition: Monolithic to Scalable Microservices on AWS | Technologies:** Node.js, AWS (ECS, ECR, ALB, EC2), Docker, REST APIs, Microservices, Load Balancing, Postman

- Improved scalability and fault tolerance by transitioning a Node.js monolithic application to microservices on AWS, leveraging Docker for containerization, Amazon ECR for image storage, and Amazon ECS for efficient deployment.
- Enhanced system performance and availability by implementing path-based routing with ALB, designing ECS task definitions for modular microservices, and conducting end-to-end API testing using Postman to ensure reliability.

**Full Stack Android Quiz Application with Efficient Question Allotment Algorithm | Technologies:** Java, Android Studio, XML, Firebase (Authentication, Realtime Database), Data Structures

- Developed a full-stack Android Quiz Application with Firebase Authentication, real-time database storage, and an optimized question allocation algorithm using HashMaps and Queues to prevent repetition and enhance user experience.

**Full Stack Food Delivery App - Foodie | Technologies:** MongoDB, Express.js, React.js, Node.js, JSON Web Tokens (JWT)

- Built a full-stack food delivery web application using the MERN stack, implementing user and admin roles, MongoDB for dynamic data management, JWT for secure authentication, Express and Node.js for backend APIs, and a responsive React frontend.

## EDUCATION

**Master of Science in Computer Science (MS)** | North Carolina State University, Raleigh, NC (GPA: 4.0, Graduated May 2025)

**Bachelor of Science in Computer Science (BS)** | JSS Science and Technology University, Mysuru, Karnataka, India - 2021

## TRAINING & CERTIFICATIONS

**AWS Certified Solutions Architect Associate** | Amazon Web Services, Aug 2024 – Aug 2027

**AWS Certified Cloud Practitioner** | Amazon Web Services, Aug 2024 – Aug 2027