

RUTHVIK KUMAR LAKKA

SOFTWARE ENGINEER

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PROFESSIONAL SUMMARY

Java Full Stack Engineer, experience in building scalable, cloud-native applications. Proficient in Java, Spring Boot, RESTful APIs Angular, and SQL, with hands-on expertise in AWS and Docker containerization. Strong background in Agile delivery, CI/CD pipelines, and cross-functional collaboration to deliver high-performance software solutions.

PROFESSIONAL EXPERIENCE

Backend Developer, Fact Finders Pro

Oct 2024 - May 2025

- Developed distributed microservices in Java and Spring Boot running on containerized EC2 workloads, improving request throughput and cutting end-to-end latency by 40 percent.
- Built a high-volume ingestion pipeline using Kafka and AWS Lambda, enabling smooth handling of multimodal submissions (text, image, audio, video) and eliminating verification bottlenecks, improved peak-load responsiveness by 40% and supported thousands of events per day without backlogs.
- Designed asynchronous processing pipelines with AWS Lambda to orchestrate claim classification, drastically reducing bottlenecks and improving system responsiveness during peak load.
- Implemented durable storage flows using DynamoDB and S3, enabling fast retrieval of verification snapshots and maintaining complete audit histories for cross-team review.
- Built secure, schema-driven REST interfaces with request validation and error-handling logic, reducing malformed inputs and improving API reliability by 35 percent.
- Established end-to-end observability using AWS CloudWatch dashboards, consumer-lag tracking, and structured JSON logs, improving failure detection and cutting mean-time-to-debug by 25%, resulting in higher platform uptime and smoother operations.
- Automated delivery using GitHub Actions with build/test/deploy pipelines, shortening release cycles by 70 percent and increasing deployment consistency across environments.

Software Engineer, Infosys

Jun 2019 - Jul 2022

Global Pricing Configurator (Bain & Company)

- Developed the core pricing engine using Java, Spring Boot, and SQL Server, enabling partners to apply rules, discounts, and regional adjustments with fast computation and consistent output quality.
- Built an interactive front-end using JavaScript, Angular with reusable components for SKU selection, configuration, mid-year adjustments, and multi-country pricing, reducing user errors and improving workflow speed.
- Designed a modular backend framework that supported dynamic loading of 200+ SKUs, allowing admin teams to onboard new products and pricing rules without downtime.
- Implemented high-performance data access using PostgreSQL stored procedures, optimized queries, and caching, improving response times for complex pricing scenarios.
- Automated delivery pipelines using Kubernetes, Docker Compose, and CloudFormation, ensuring stable multi-region deployments and reducing release time by 30 percent.
- Wrote unit, integration, and end-to-end tests across frontend and backend, reducing defects by 30%.

Internal Automation Tools - Software Engineer Intern

- Developed automation utilities using Java and Spring Boot deployed on AWS EC2, reducing repetitive manual workflows for internal teams.
- Built UI components in React for internal dashboards, improving clarity and reducing approval turnaround time.
- Supported CI/CD automations using Docker and Jenkins, accelerating sprint deployment cycles.

PROJECT EXPERIENCE

Heart Failure Prediction using Machine Learning | [Project Link](#)

- Built a Flask-based prediction API using Random Forest (Scikit-learn), achieving 87% accuracy in cardiovascular risk detection through engineered clinical features.
- Optimized model performance using data preprocessing (Pandas, NumPy), cross-validation, and GridSearchCV, improving generalization and reducing overfitting.

EDUCATION

Master of Science in Computer Science | Flagstaff, AZ, USA

NORTHERN ARIZONA UNIVERSITY

B.Tech. in Computer Science | Chennai, INDIA

ST. JOSEPH'S INSTITUTE OF TECHNOLOGY

TECHNICAL SKILLS

Programming Languages: Java, JavaScript (ES6+), HTML, CSS, SQL, Python, TypeScript

Technologies: Spring/Spring Boot, Angular, ReactJS, RESTful APIs, Node.js, Microservices, Kafka, RESTful APIs, Redux

Databases: PostgreSQL, Oracle DB, MySQL, DynamoDB

Cloud & DevOps: AWS (S3, EC2, Lambda, API Gateway, CloudFormation, EKS), Git/GitHub, Confluence, Docker, Kubernetes, Github Actions, Jenkins

Tools & Methodologies: Tableau, Jira, Visual Studio Code, Agile, Cucumber, Scrum, Unit / Integration Testing, JUnit, JWT Authorization

Other Skills: OOP, Problem Solving, Documentation, Cross- Functional Collaboration, Critical Thinking, Communication