

AKSHAYA KOLLA

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PROFESSIONAL SUMMARY

- Senior Full Stack Software Engineer with 5+ years of experience building and scaling enterprise web applications across healthcare, banking, and airline domains in U.S. environments.
- Hands-on expertise in Java, Spring Boot, React, RESTful microservices, and cloud-native development on AWS and Azure, supporting high-availability and real-time application workflows.
- Proven ownership of end-to-end delivery, including frontend development, backend services, database optimization, CI/CD automation, and production support.
- Strong background in event-driven systems and performance optimization, delivering measurable improvements in latency, reliability, and system uptime (99.9%).
- Effective collaborator with product, QA, DevOps, and business teams, translating operational and regulatory requirements into secure, maintainable, and production-ready solutions.

TECHNICAL SKILLS

Programming Languages: Java (Java 8/11/17, OOP, Collections Framework, Multithreading, Concurrency, Exception Handling, JVM Basics), JavaScript (ES6+), TypeScript, Python, SQL, Bash

Frontend Development: React.js, Redux Toolkit, Angular, HTML5, CSS3, Tailwind CSS, Bootstrap, Webpack, Vite, Responsive UI Development

Backend Development: Spring Boot, Spring MVC, Spring Security, Spring Data JPA, Hibernate/JPA, RESTful APIs, Microservices Architecture, Event-Driven Systems, Distributed Systems, Spring Cloud, Feign Client, Eureka, Node.js, Express.js, OAuth2, JWT

Databases: PostgreSQL, MySQL, Oracle, MongoDB, Redis, Query Optimization, Indexing

Cloud & Platforms: AWS (EC2, S3, EKS, SQS, RDS), Azure (AKS, Active Directory, Blob Storage, Key Vault)

DevOps & CI/CD: Docker, Kubernetes, Jenkins, GitHub Actions, Terraform, Maven, Gradle

Messaging & Asynchronous Processing: Apache Kafka, AWS SQS, RabbitMQ

Testing & Quality: JUnit, Mockito, Selenium, Postman, Swagger, OpenAPI, SonarQube

Monitoring & Logging: Splunk, ELK Stack, Prometheus, Grafana

Development Practices: Agile Scrum, SDLC, Secure Coding Practices, OWASP Top 10, Design Patterns (Singleton, Factory, Builder, Strategy)

PROFESSIONAL EXPERIENCE

Senior Java Full Stack Developer

Aug 2024 - Present

Ascension Health | St. Louis, MO

- Owned full-stack delivery of patient scheduling and care coordination capabilities using Java, Spring Boot, React, and REST APIs, cutting manual administrative workflows by 32% across outpatient clinics.
- Applied Core Java concepts including Collections Framework, multithreading, concurrency control, and exception handling to build thread-safe Spring Boot services, improving API performance by 41% under concurrent clinical workloads.
- Clinical teams gained clearer operational visibility through real-time dashboards built with React, TypeScript, Redux Toolkit, and Tailwind CSS, improving daily workflow efficiency by 28%.
- Data consistency across EHR and partner platforms increased by implementing REST and SOAP services aligned with FHIR standards, raising interoperability accuracy by 35%.
- Designed scalable microservices using stateless architecture, caching strategies, and asynchronous processing to support high availability and peak traffic loads.
- Accountability for uptime was established by running microservices on Azure AKS and AWS EKS with Docker and Kubernetes, consistently maintaining 99.9% application availability.
- Improved JVM performance by optimizing memory utilization, connection pooling, and database access patterns, reducing latency and improving throughput under concurrent load.
- Close partnership with clinicians, product owners, QA, and DevOps translated regulatory needs into deployable features, sustaining 100% sprint delivery consistency.

Software Developer

May 2021 - Jul 2023

Fifth Third Bank | Cincinnati, OH

- Strengthened core banking services using Core Java features such as Collections Framework, concurrency utilities, and JVM tuning, reducing transaction failure rates by 29% during peak customer activity.
- Customer-facing digital banking workflows were refined using React, Angular, and JavaScript, improving page load times by 34% and increasing adoption of self-service tools.
- Secure system integrations were hardened through OAuth2, JWT, REST, and SOAP services, supporting regulatory compliance and completing audits with zero findings.

- Fraud detection responsiveness improved after implementing Kafka and RabbitMQ event pipelines, reducing suspicious transaction detection latency by 42%.
- Transaction throughput increased by tuning PostgreSQL, Oracle, MongoDB, and Redis queries with indexing and caching, lowering response times by 37% under concurrent load.
- Release risk decreased after standardizing Jenkins, Maven, Docker, and Kubernetes workflows, cutting deployment downtime by 46% and improving rollback reliability.
- Audit readiness improved by integrating KYC and compliance documents into Azure Blob Storage, reducing manual document handling effort by 31% for risk teams.
- Collaboration with compliance, QA, and product partners ensured regulatory requirements translated into stable releases, maintaining 85%+ regression stability.

Full Stack Developer

Jun 2019 - May 2021

United Airlines | Chicago, IL

- Built booking and reservation services using Core Java principles including multithreading, synchronization, and exception handling with Spring Boot, reducing booking failures by 27% during peak travel periods.
- Real-time flight status visibility improved after delivering dashboards with React, Angular, and WebSockets, enabling operations teams to react to delays 33% faster.
- Passenger data protection strengthened by implementing Spring Security with OAuth2 and JWT, maintaining 100% compliance with airline security standards.
- Loyalty rewards, ticket changes, and baggage workflows were implemented through Spring Boot microservices, improving transaction processing speed by 29%.
- Availability of customer-facing systems increased by deploying Docker-based services on AWS Kubernetes with autoscaling, sustaining 99.9% uptime.
- Event propagation delays dropped after integrating Apache Kafka and AWS SQS for baggage and flight updates, improving processing speed by 41%.
- Reservation and check-in performance improved by optimizing Oracle, MySQL, and MongoDB queries, reducing average response times by 35%.
- Delivery coordination with product, QA, and airline operations teams supported Jenkins-based CI releases, improving deployment reliability across production environments.

PROJECTS

Cloud-Native Healthcare Management Platform

- Built a secure healthcare web application using React, Spring Boot, and REST APIs to support patient data access, scheduling workflows, and clinician coordination across multiple departments.
- Improved application scalability and event handling by implementing microservices with Apache Kafka on Azure AKS, ensuring consistent performance during concurrent clinical activity.
- Streamlined deployments by configuring CI/CD pipelines with Docker, Jenkins, and Terraform, enabling repeatable releases and reducing environment-related deployment errors.

Real-Time Banking Fraud Detection System

- Developed backend transaction processing services using Java, Kafka, and Spark to analyze high-volume financial events and surface anomalous activity for fraud review teams.
- Created secure REST APIs and analyst dashboards with React and Angular to visualize transaction risk signals and support faster fraud investigation workflows.
- Enhanced system reliability by optimizing streaming pipelines and compute utilization, allowing near real-time monitoring without impacting core banking performance.

Airline Operations Monitoring Dashboard

- Implemented a real-time operations dashboard using React and WebSockets to display live flight status, gate activity, and operational events for airline operations teams.
- Integrated backend services with geospatial APIs to map flight movements and airport activity, improving situational awareness during schedule changes and disruptions.
- Deployed the platform on AWS using Kubernetes and CI/CD automation, ensuring consistent availability and rapid rollout of feature updates across environments.

EDUCATION

Master of Science in Computer Science

University of Texas | Arlington, TX

CERTIFICATIONS

- Meta Front-End Developer Professional Certificate - **Coursera**
- IBM Full Stack Software Developer Professional Certificate - **Coursera**
- Spring Boot Microservices with Spring Cloud - **LinkedIn Learning**
- Docker and Kubernetes: The Complete Guide - **LinkedIn Learning**
- AWS Cloud Practitioner Essentials - **Coursera**
- Building Scalable Java Microservices with Spring Boot - **Coursera**