

AAKASH BASNET

Software Engineer

PROFESSIONAL SUMMARY

Software Engineer with over 5 years of experience in the design, development, and deployment of secure and resilient Java, Spring Boot microservices. Proven expertise in building high-quality, production-grade systems on AWS using CI/CD, Agile methodologies, and modern database solutions like PostgreSQL, MySQL, and MongoDB.

EMPLOYMENT HISTORY

FULL STACK JAVA DEVELOPER

S3 Technical Solutions Inc

Feb 2025 - Present

Irving, Texas

- Designed and developed RESTful microservices in Java 17 with Spring Boot and Hibernate as an ORM framework, deployed on AWS (ECS, Aurora RDS, SQS, S3), supporting real-time scheduling of 1000+ sports events/month.
- Implemented secure APIs with Spring Security and JWT; integrated payment platforms (Stripe, PayPal SDKs) for transactional flows averaging \$15K+/month.
- Integrated Apache Kafka for real-time event streaming and notification systems, enabling asynchronous, fault-tolerant delivery of match events and user updates.
- Engineered fault-tolerant microservices by implementing retry logic, timeout strategies, and circuit breakers using Resilience4j; enhanced application resiliency and maintained uptime during transient AWS failures and downstream service outages.
- Authored complex SQL queries and database logic across PostgreSQL and Aurora, optimizing access patterns and reducing latency by 40%.
- Participated in code reviews, design sessions, and Agile ceremonies to align architectural decisions with stakeholder goals.
- Built reusable React components and managed application state using Hooks and Context API.

FULL STACK JAVA DEVELOPER

Mastercard

Jan 2025

St. Louis, MO

- Led the design of end-to-end solutions, authoring key architectural artifacts (sequence diagrams, API specifications) to translate business requirements into clear technical designs and best practices.
- Actively participated in the full Agile lifecycle, including sprint planning, backlog grooming, and product demos with cross-functional global teams.
- Designed and developed 20+ RESTful APIs and Hibernate as an ORM framework to support save, edit, and submit functionality for dynamic forms and services, enabling seamless data flow between frontend (ReactJS) and backend (Java).
- Defined API standards for input validation, status codes, and payload formats across the save/edit/submit lifecycle, reducing API rework by 25%.
- Collaborated with AppSec on threat modeling, fixing 100% of SAST/DAST issues flagged by SonarQube and Check Marx.
- Created 100+ SQL queries and views in PostgreSQL to power form-based functionality; utilized PgAdmin for query optimization and database management.
- Conducted rigorous code reviews and mentored junior developers, fostering a culture of high-quality, secure, and maintainable code.
- Built and maintained a library of reusable front-end components and services that accelerated new feature development by 30% and ensured UI consistency across the application.
- Integrated and customized Ag-Grid to handle large datasets, enabling users to render, filter, and sort over 50,000 rows with sub-second response times.

- Integrated unit and integration tests using JUnit, Mockito, contributed to CI/CD pipelines via Jenkins and Bitbucket ensuring 100% test coverage.

FULL STACK JAVA DEVELOPER

University of Colorado

May 2022

Denver, CO

- Built and deployed 10+ distributed microservices in Java 8 using Spring Boot on AWS/OpenShift, supporting student and admin financial workflows.
- Designed event-driven processing using Kafka, SOAP, and REST APIs for handling 100K+ real-time messages per day.
- Created database-driven apps with PostgreSQL and Oracle and Hibernate as an ORM framework; wrote optimized DDL/DML and SQL scripts, improving reporting time by 30%.
- Developed lightweight internal tools using Node.js for automation scripts, user notifications, and integration with student data APIs.
- Designed and built dynamic 20+ user interface components leveraging React.js concepts, including functional components and React Hooks (useState, useEffect, useCallback, useMemo, useContext), to manage state, lifecycle events and context effectively.
- Automated CI/CD deployments with Jenkins/Maven; maintained application reliability using Log4j and performance monitoring tools.
- Practiced Agile methodologies and collaborated on sprint planning, backlog refinement, and test case validation.

EDUCATION

BACHELOR OF SCIENCE IN COMPUTER SCIENCE

Howard University

Aug 2015 - May 2019

Washington, D.C

Course Works: Data Structures and Algorithms, Software Engineering principles, Object Oriented Programming, Machine learning, Operating Systems, Computer Networking, Database Management, Probability and Statistics, Computer Organization, Calculus, Discrete Mathematics, Numerical Analysis

SKILLS

Java, Spring Boot, Spring Security, React, Redux, Angular, PostgreSQL, MongoDB, Docker, Kubernetes, Jenkins, Git, REST, GraphQL, Kafka, Microservices, Node.js, TypeScript, JavaScript, CI/CD, Agile, AWS (EC2, ECS, ECR, Aurora RDBMS, Dynamo DB, EKS, SQS), Docker, Ansible, Terraform, JUnit, Mockito, SonarQube, Checkmarx, Fortify, Log4J, MySQL, .

LINKS

Website: www.aakashbasnet.com.

ADDITIONAL INFORMATION

ACHIEVEMENTS

1st place in MIT Tech Policy Hackathon 2022

- ◆ Collaborated in a cross-disciplinary team to address challenges faced by elderly populations during the COVID-19 pandemic.
- ◆ Conducted data analysis to identify high-risk demographics and service gaps, contributing to actionable policy recommendations.
- ◆ Presented findings to a panel of judges, resulting in winning the competition among several competing teams.
- ◆ Work informed potential policy decisions on eldercare access, digital inclusion, and public health interventions.

FOUNDER'S SCHOLARSHIP

The Founder's Scholarship, worth \$ 50,000 per year, includes tuition, room and board, and a \$ 1,500 stipend per semester.