

# 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

Feb 2025 - Present

*S3 Technical Solutions Inc*

*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

Jan 2025

*Mastercard*

*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](http://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.