VAMSI KRISHNA BHAGAVATHULA

Software Developer | Graduate Research and Teaching Assistant | Academic Excellence awardee | AWS Certified Solution Architect | vamsi.bh32@gmail.com | 614-619-0022 | LinkedIn

Full Stack Java Developer with 6 years of experience building scalable microservices, cloud-native applications, and enterprise web platforms using Java 17, Spring Boot, React/Angular, and AWS. Strong expertise in distributed systems, CI/CD automation, event-driven architecture, messaging systems, and performance optimization. Proven ability to modernize legacy applications, enhance system reliability, and deliver secure, high-availability solutions. Recognized for academic excellence, research contributions, and mentorship.

EDUCATION

Master of Science in Applied Computer Science | Columbus State University | GA

Relevant Coursework: Object Oriented Programming | Algorithms | Machine Learning | Relational database Management System | Network and Cloud Management

Bachelor's Degree in Computer Science | JNTUH | India

SKILLS

Backend: Java 17, Spring Boot, Microservices, Web Flux, REST APIs, Hibernate, JPA
Frontend: React.js, Redux Toolkit, Angular 12–16, TypeScript, JavaScript
UI/UX: Component Architecture, Lazy Loading, Accessibility (WCAG), Theming, Flexbox, CSS Grid, Performance Optimization
Cloud & DevOps: AWS (EC2, S3, ECR, IAM, Lambda), Docker, Kubernetes, Jenkins, CI/CD
Messaging: Kafka, RabbitMQ
Databases: PostgreSQL, MySQL, MongoDB
Testing: JUnit, Mockito, REST Assured, TDD
Tools: Git, Maven, Gradle, JIRA, Swagger/Open API

PROFESSIONAL EXPERIENCE:

Java Full Stack Developer   Feb 2025 - Present
Verizon

- Modernized legacy telecom platforms by converting monolithic components into event-driven microservices using Java 17, Spring Boot, Web Flux, Kafka, and PostgreSQL/MySQL.
- Delivered 30+ high-quality REST APIs across distributed services, improving maintainability and reducing redundant logic by 40%.
- Built responsive and high-performing UIs using React.js and Redux Toolkit, enabling real-time updates and lowering UI latency by nearly 40%.

- Tuned SQL queries, optimized indexing strategies, and refined stored procedures, improving reporting and data retrieval performance by 30%.
- Implemented messaging workflows using RabbitMQ and IBM MQ to support smooth communication between new services and legacy systems during the TracFone integration.
- Strengthened CI/CD pipelines with Jenkins, Docker, Kubernetes, and Unleash, ensuring reliable and zero-downtime deployments.
- Improved frontend performance through caching, lazy loading, and code-splitting techniques.
- Enhanced system security with JWT authentication, role-based access control (RBAC), and OWASP-aligned secure coding practices.
- Improved system resilience with circuit breakers, retries, and backpressure handling, enabling 99.99% application uptime.
- Introduced ELK Stack for centralized log analytics, cutting MTTR by 35%.
- Ensured high code quality through JUnit, Mockito, and REST Assured, maintaining 85%+ test coverage and lowering production defects.
- Mentored junior developers on microservices, DevOps practices, and frontend architecture.

Full Stack Software Developer,   Jan 23 – Feb 25
SLHT Services

- Contributed to all phases of SDLC, from requirement analysis to deployment and post-release support for enterprise workforce applications.
- Built secure microservices using Java 11, Spring Boot, Spring Cloud, Spring Security, JPA/Hibernate, and integrated Swagger for API documentation and testing.
- Developed dynamic dashboards and admin interfaces using Angular 16, React.js, Highcharts, and Chart.js to deliver real-time analytics for compliance and reporting teams.
- Designed and optimized PL/SQL and SQL queries, improving large-scale reporting performance and enabling real-time insights.
- Tuned AWS RDS (PostgreSQL/MySQL) schemas and indexing strategies to support high-volume workloads.
- Automated recurring reports and data validation workflows through advanced SQL scripting, reducing manual work and errors.
- Implemented robust form validation using Angular Reactive Forms and React Hook Form for complex multi-step workflows.
- Built role-based, token-secured routing using Angular Guards and React Router to protect sensitive UI flows.
- Developed SPAs in Angular 12 using modules, custom directives, and reusable components with HTML5, CSS3, TypeScript, and ES6.
- Streamlined deployments using Jenkins, Gradle, Docker, and Kubernetes, improving release consistency and turnaround time.
- Deployed microservices on AWS ECS/EC2 and integrated services with S3, ECR, Lambda, API Gateway, IAM, VPC, SNS, SQS, and DynamoDB.

- ☐ Applied TDD practices with JUnit and Mockito to enhance reliability and reduce regression risks.
- ☐ Integrated Lambda with SQS and Step Functions to automate message processing and status updates in DynamoDB.
- ☐ Built and maintained Splunk dashboards to monitor application health and performance trends.
- ☐ Collaborated with Agile teams using JIRA for sprint planning, story tracking, and progress visibility.
- ☐ Delivered responsive, cross-device UI experiences using Bootstrap and modern styling practices.

Junior Software Developer,   Jun 19 – Aug 21
Silicon Matrix, India.

- ☐ Developed frontend features for an e-commerce platform using React, Redux-Saga, Hooks, React Router, JavaScript, HTML5, CSS3, and Bootstrap.
- ☐ Assisted in implementing backend APIs using Java, Spring Boot, REST, and JWT authentication to support secure CRUD operations.
- ☐ Designed relational data models and wrote SQL queries to support API functionality and improve data access efficiency.
- ☐ Improved API performance by troubleshooting SQL bottlenecks and optimizing query execution.
- ☐ Adopted React Hooks for state and lifecycle management while contributing to reusable UI components.
- ☐ Performed unit testing using Jest and Enzyme to ensure component stability and UI correctness.
- ☐ Connected frontend flows with backend services developed in Java, JSP, J2EE, and Spring MVC.
- ☐ Supported maintenance of legacy Spring MVC applications and contributed to upgrading modules using Spring Boot.
- ☐ Assisted with AWS deployments using EC2, S3, and IAM, gaining exposure to cloud-based application hosting.
- ☐ Contributed to CI/CD processes and pipeline maintenance, learning automation best practices.

RESEARCH & ACHIEVEMENTS
- ☐ Published thesis: "***Towards Energy-Efficient Edge Computing for Tiny AI Applications***"
- ☐ Presented research: "***Mutual Authentication Protocol between IoT Devices and Hardware Security using ZYMKEY***" ACM Conference, Gatlinburg, TN (2022)
- ☐ Graduate Research & Teaching Assistant for Python, Java, SQL, Database Design
- ☐ Instructor for "Robotics Programming" and "Python with Cybersecurity" summer camps (2022)
- ☐ Received Academic Excellence Award (April 2023)
- ☐ AWS Certified Solutions Architect