Shesha Sai Ganduri

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Backend Software Engineer

Backend Software Engineer with expertise in designing, building, and deploying **scalable, fault-tolerant backend systems** using **Java (8–17)**, **Spring Boot**, and **microservices architecture**. Skilled in developing **RESTful APIs**, implementing **event-driven solutions** with **Apache Kafka**, and integrating with **SQL** (Oracle, PostgreSQL) and **NoSQL** (Cassandra, MongoDB) databases. Proficient in containerization and orchestration using **Docker** and **Kubernetes**, with practical experience configuring **Kubernetes clusters** for auto-scaling, rolling updates, and high availability in production environments. Well-versed in managing **Kubernetes manifests**, **Helm charts**, and leveraging tools like **Prometheus** and **ELK Stack** for monitoring and observability. Experienced in **CI/CD pipelines** using **Git**, **GitHub Actions**, and **Jenkins**, enabling automated testing and deployments. Strong focus on system reliability, performance tuning, and collaborative Agile delivery of cloud-native backend services for modern eCommerce and merchandising platforms.

WORK EXPERIENCE

Movate **05/2023 - Present**

Senior Software Developer

- Designed and implemented enterprise-grade microservices from scratch using Spring Boot and Java 17, enabling high scalability and reducing latency by 50%.
- Delivered 100K+ daily requests efficiently by architecting robust, stateless REST APIs using Spring MVC.
- Strengthened security posture by implementing token-based authentication with Spring Security (OAuth2, JWT), reducing unauthorized access incidents.
- Enhanced data throughput and real-time communication by integrating Apache Kafka, processing 10K+ events/second.
- Successfully migrated and deployed over 7 microservices to Kubernetes, enabling auto-scaling, rolling updates, and reducing deployment time by 70%.
- Integrated SonarQube for continuous code quality checks and implemented Helm charts for managing Kubernetes deployments; also configured API routing via Apigee and Ambassador for secure, scalable microservice communication.
- Improved API response times by 35% through Redis caching, optimizing read-heavy operations across services.
- Achieved seamless database integration and reduced query complexity by combining Oracle, MySQL, MongoDB and Cassandra with JPA and JDBC.
- Reduced deployment time from 1 day to 2 hours by automating CI/CD workflows using Jenkins, Docker, and GitHub Actions.
- Ensured application resilience and observability by configuring ELK Stack and integrating Prometheus-based monitoring.
- Streamlined federated login using SAML 2.0 and enhanced user provisioning workflows across microservices.
- Decreased frontend API load by 20% using GraphQL alongside REST APIs for granular data fetching.

- Improved inter-service security using Java Cryptography Extension (JCE) for encrypted token communication.
- Increased development velocity by mentoring 4 junior engineers and driving best practices through code reviews.
- Enhanced mobile-first UI performance using Angular 12 and RxJS, leading to a 40% increase in user engagement.
- Ensured 90%+ test coverage and regression reliability by developing comprehensive unit and integration tests.
- Delivered all sprint goals consistently across Agile sprints, maintaining a 100% story completion rate
- Applied advanced data structures and algorithms in designing cache-aware service flows and optimizing request routing for microservices.
- Handled production deployments, post-release monitoring using Prometheus, Kibana, and ELK Stack, and resolved live bugs and performance issues while conducting code reviews, enforcing coding standards, and supporting team knowledge sharing.
- Performed root cause and failure analysis for production issues, reducing recurring incidents.

Bank Of India **04/2021 - 03/2023**
Software Engineer - II

- Involved in requirements gathering, analysis, design, development, testing, and production support of applications
- Migrated core banking systems to a microservices architecture, reducing release cycles from monthly to weekly.
- Enabled asynchronous processing for 1M+ transactions/month using Kafka and Spring Cloud Stream.
- Reduced frontend data overhead by 70% through the adoption of GraphQL APIs for dynamic data fetching.
- Improved customer profile API response times by 40% with Redis caching implementation.
- Consolidated data storage and improved reporting by integrating MongoDB and Oracle in backend services.
- Strengthened authentication flows with JWT, OAuth2, and Spring Security, reducing login errors by 25%.
- Orchestrated internal system integration using Apache Camel for REST-to-SOAP conversions.
- Enhanced user experience by delivering Angular 12-based interfaces integrated with HTTPClient services.
- Streamlined deployments by implementing Docker containers and Jenkins pipelines, accelerating release delivery by 60%.
- Achieved 90%+ test automation coverage using JUnit, Mockito, and JMeter for robust application testing.
- Automated administrative processes with Groovy scripts, saving 20+ hours/month in manual intervention.
- Maintained centralized configuration and fault tolerance via Spring Cloud Config and Hystrix.
- Resolved 100+ bugs by leading defect triage meetings and collaborating across QA and DevOps teams.
- Enabled 24x7 system availability through monitoring dashboards built with Kibana and ELK.

- Contributed to 3 system design reviews that improved system modularity and onboarding of new developers.
- Developed Spring Batch jobs for scheduled reconciliation of financial transactions, processing over 500K records.
- Gained strong domain exposure to core banking and financial transaction risk systems while supporting microservices for KYC, transaction history, and regulatory reporting.
- Participated in system design sessions and contributed to architectural decisions impacting microservice boundaries, data partitioning, and load distribution.
- Deployed containerized core banking microservices to Kubernetes clusters, improving system uptime and streamlining environment consistency across dev, test, and prod.
- Migrated high-volume services from monoliths to containerized microservices on Kubernetes, improving fault isolation and deployment agility.
- Enabled dynamic scaling and zero-downtime deployments for loan processing workflows using Kubernetes orchestration with Docker and Jenkins pipelines.

Bajaj Finserv **07/2018 - 02/2021**
Software Developer

- Involved in various phases of SDLC as requirement gathering, modeling, analysis, architecture design and development and the project was developed using Agile Methodologies.
- Spearheaded the migration of a JBoss monolith into Spring Boot and Node.js microservices, reducing system crashes by 60%.
- Increased inter-team integration by developing 30+ REST/SOAP APIs for policy processing and customer servicing.
- Processed over 50K loan applications/month by designing Kafka pipelines with Redis-based caching.
- Improved database transaction reliability using optimized Hibernate ORM and PostgreSQL performance tuning.
- Boosted UI responsiveness by 45% through Angular and React-based frontends with Redux state management.
- Secured frontend/backend interaction by implementing JWT and OAuth2 across authentication modules.
- Enhanced development agility by reusing design patterns (DAO, Factory, Singleton) across 20+ services.
- Delivered legacy UI modernization using JSTL, AJAX, jQuery, and Bootstrap for responsive web apps.
- Reduced manual data errors by 80% via automated backend ETL scripting and Groovy utilities.
- Cut deployment efforts in half by automating CI/CD pipelines with Jenkins and containerizing services with Docker.
- Increased system throughput with asynchronous REST handling via Talend ESB and Spring WebFlux.
- Supported production releases with 95% success rate by resolving critical issues and incident triage under SLAs.
- Reduced report generation time from 30 mins to under 10 mins by optimizing HQL queries and index tuning.
- Integrated secure messaging with SMS/email gateways, improving customer notification reliability.
- Built internal performance dashboards with Elasticsearch queries and Kibana visualizations for audit teams.

- Implemented Java multithreading to handle concurrent loan application processing, improving throughput by 30% during peak load.
- Automated system backups and performed filesystem management on Unix environments, using shell scripting for data cleanup, permission handling, and service uptime checks.
- Automated service deployment and scaling policies using Kubernetes HPA and ConfigMaps, reducing manual intervention and improving operational efficiency.

EDUCATION

Bachelor's in Computer Sciences
Vidya Jyothi Institute of Technology • Telangana • GPA: 8.4/10 08/2014 - 04/2018

CERTIFICATIONS

Microsoft Certified: Azure Fundamentals
microsoft

PROJECTS

Digital Portfolio – React + Vite

- Built a modern, responsive developer portfolio using React with Vite for lightning-fast builds and modular code structure.
- Showcases live projects, tech stack, and resume with intuitive navigation and mobile-first design.
- Deployed and maintained on WIX, integrated with GitHub for live project updates.
- Link: https://portfolio-obk3.vercel.app/

Currency Converter – Spring Boot | Redis | GraphQL | ELK

- Developed a currency conversion backend with REST and GraphQL APIs, supporting dynamic queries.
- Reduced third-party API load by 40% using Redis caching with TTL configuration.
- Packaged with Docker and deployed to EC2 with GitHub Actions-based CI/CD.
- Link: https://github.com/seshu-sai/CurrencyConvertor

Inventory Management System – Spring Boot | Microservices | PostgreSQL | Kafka | Eureka | OpenFeign | JWT

- Engineered a microservices-based system with 7 Spring Boot services registered on Eureka for service discovery.
- Used OpenFeign for inter-service REST calls and JWT with Spring Security for secure API access.
- Enabled real-time inventory updates using Kafka; PostgreSQL used across services for relational data.
- Link: https://github.com/seshu-sai/Inventory_Order_Management

Leave Management System – Spring Boot | Angular | MySQL | JWT

- Designed and developed a full-stack leave tracker using Angular for the frontend and Spring Boot for backend services.
- Secured user flows using JWT and implemented RBAC to manage employee roles and leave approvals.
- Used MySQL with Spring Data JPA to persist leave records and manage audit history.
- Link: https://github.com/seshu-sai/JAVA-LeaveManagementApp

VOLUNTEERING & LEADERSHIP

GitHub – Various Projects

Open Source Contributor • scarborough, ON

Contributed bug fixes and feature improvements to open-source Spring Boot and Docker-based projects. Collaborated via pull requests, issue tracking, and community discussions.

Vidya Jyothi Institute of Technology

Tech Workshop Volunteer • Hyderabad, Telangana

Delivered beginner-friendly talks on deploying Java apps to the cloud and using GitHub. Supported attendees with hands-on labs.

SKILLS

Programming Languages: Java 11, Java 17, Python

Operating Systems: Linux, Mac, Unix, Windows

ORM technology: Hibernate, iBatis, MyBatis

GUI: AJAX, Angular 12, CSS3, DHTML, HTML, HTML5, Java Script, jQuery, JSP, SASS

IDEs: Eclipse, IntelliJ, NetBeans, RAD

Application Servers/Web Servers: Apache Tomcat, Glassfish, Jboss, Oracle, WebLogic, WebSphere, Wildfly

Applications Frameworks and modules: Batch, Cloud, JSF, Spring, Spring Boot, Spring Core, Spring Framework, Spring Hibernate, Spring JDBC, Spring MVC, Spring Security, Struts

Databases: Cassandra, MongoDB, MySQL, Oracle, SQL Server

Web Technologies: AJAX, Angular 12.0, Angular 8, AngularJS, Bootstrap, CSS3, JavaScript, jQuery, JSON, Node.js, React JS, Typescript HTML5, XML, XSD, XSL/XSLT

Web Services: AWS, JAXB -Apache CXF, Microservices, REST, RESTful, SAAJ, SAXJ, SOAP, WSDL

Version Control Systems: GIT, SVN

Tools: DOM, Log4J, Viewer: JUnit

SOA/Web Services: REST services WSDL, SOA, SOAP

Build Automation Tools/ Issue Tracking Tools: Ansible, ANT, Gradle, Jenkins, Jira, Maven, puppet, Rally

Cloud Technologies: AWS, Azure, Google Cloud

AWS Skills: AMI, CLI, DBA, DNS, DynamoDB, EBS, EC2, ELB, GIT, IAM, NAT, RDS, Route53, S3, SNS, VPN

Other Tools: Code Coverage, Code Quality, MS Visio Professional, StarUML

Java Technologies: AJAX, EJB, J2EE, JDBC, JMS, JNDI, JPA, JSE, JSP, JSTL, Servlets

CI/CD Tools: Azure Devops, git lab, Jenkins

Containerization: Docker, Kubernetes