

Venkata Karthik Goud Gadudula

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Summary

Full Stack Software Engineer with 4 years of experience building scalable backend services, REST APIs, microservices, distributed systems, and cloud-native applications across enterprise environments. Strong expertise in Java, Spring Boot, Spring WebFlux, Python, React, TypeScript, SQL, PostgreSQL, event-driven architecture, and AI-enabled application development. Experienced in Agentic AI, RAG, MCP, tool calling, Kafka, Kubernetes, AWS, secure API development, and enterprise application modernization. Skilled in designing reliable systems, optimizing performance, implementing security controls, and delivering production-ready solutions through automated testing, CI/CD, infrastructure as code, observability, and collaborative engineering practices.

Technical Skills

- Programming & Full Stack Development:** Java, Python, C, C++, SQL, TypeScript, React, Next.js, React Native, Spring Boot, Spring WebFlux, FastAPI, REST APIs, WebSockets, Hibernate, Spring Data JPA
- AI, Distributed Systems & Architecture:** Agentic AI, LangGraph, OpenAI Agents SDK, MCP, RAG, Tool Calling, NL-to-SQL, Microservices, Distributed Systems, Event-Driven Architecture, Apache Kafka, Apache RocketMQ, Temporal, Redis Streams, Celery, Spark Streaming
- Databases, Cloud & Infrastructure:** PostgreSQL, MySQL, MongoDB, Redis, Elasticsearch, pgvector, AWS, Amazon S3, Kubernetes, Docker, Terraform, Jenkins, GitHub Actions, CI/CD, Infrastructure as Code, Data Pipelines, Query Optimization, Caching
- Security, Testing & Code Quality:** Spring Security, OAuth2, JWT, RBAC, Encryption, Secrets Management, Checkmarx, SQL Injection Prevention, Cross-Site Scripting (XSS) Prevention, JUnit, Mockito, Pytest, Postman, Checkstyle, SpotBugs
- Observability & Engineering Practices:** OpenTelemetry, Prometheus, Grafana, Structured Logging, Health Checks, Audit Logging, API Integration, Authentication & Authorization, Production Troubleshooting, Code Reviews, Agile/Scrum, Technical Documentation

Professional Experience

Full Stack Software Engineer (Agentic AI), Atlassian 10/2025 – Present | Hybrid, USA

- Built the AI-Powered Teamwork Automation Platform using Java, Spring Boot, Spring WebFlux, Hibernate, PostgreSQL, and Kubernetes, connecting Jira and Confluence workflows through scalable REST APIs while improving platform response latency by 8%.
- Modernized asynchronous collaboration services with Kafka, Redis, Spring WebFlux, and Project Reactor, coordinating Jira issues, Confluence knowledge, and workflow events across distributed systems while improving processing efficiency and keeping synchronized enterprise work data.
- Orchestrated agentic workflows in collaboration with AI Engineers, integrating LangGraph, MCP, RAG, tool calling, and Java-based services to connect Teamwork Graph context with Jira and Confluence data for grounded automation and governed task execution.
- Integrated React, TypeScript, Next.js, and WebSockets with Spring Boot and Spring WebFlux services, delivering responsive collaboration experiences around Jira and Confluence workflows while standardizing API contracts, authentication, filtering, and real-time updates.
- Hardened enterprise services using Spring Security, OAuth2, JWT, RBAC, encryption, secrets management, Hibernate, and PostgreSQL, implementing secure authorization and auditing controls while protecting collaborative work data across distributed production services.
- Streamlined engineering delivery using Maven, JUnit 5, Mockito, Checkstyle, SpotBugs, Docker, Kubernetes, Terraform, GitHub Actions, and OpenTelemetry, establishing automated quality gates, CI/CD pipelines, and observability practices that reduced production defects by 12%.

Software Engineer, Tata Consultancy Services 08/2021 – 07/2024 | Hyderabad, India

USAA — Software Engineer | Monolith-to-Microservices Migration

- Decomposed tightly coupled modules from a legacy Java monolith into independently deployable Spring Boot microservices, developing REST APIs within a five-member backend team and supporting migration across a 15-member cross-functional delivery team.
- Implemented and validated REST APIs using Spring Boot, Postman, and Controller-Service-Repository architecture, redirecting development calls to new services, comparing responses against legacy implementations, and troubleshooting discrepancies using identical test data.
- Externalized hardcoded configuration into property-based files, implemented RestTemplate inter-service communication, resolved CI/CD build and dependency issues, supported production incidents, and participated in sprint planning, code reviews, and technical interviews.

Cisco Systems — Software Engineer / Stream Lead

- Coordinated remediation of 3,000+ Java and JavaScript security vulnerabilities identified through Checkmarx within a legacy Apache Struts application, supporting a five-member application stream and tracking remediation progress through Scrum ceremonies.
- Remediated SQL injection and reflected XSS vulnerabilities using parameterized queries, prepared statements, and allowlist input validation, while reviewing pull requests, validating Checkmarx scans, and resolving complex security findings requiring deeper root-cause analysis.
- Supported junior developers through technical troubleshooting and code reviews while contributing to remediation efforts that improved the application's health and performance score from approximately 40% to over 85%.

CVS Health — Software Engineer

- Developed Spring Boot REST APIs using Controller-Service-Repository architecture with full CRUD functionality, integrating Spring Data JPA with MySQL and PostgreSQL while contributing within a 12–13 member cross-functional healthcare application team.
- Built dynamic Excel reporting workflows using Spring Boot, AWS S3, REST APIs, and reusable templates, processing user-requested fields, executing business logic, mapping API responses, and generating downloadable reports with request-specific data.
- Implemented document-based persistence using MongoDB and secured REST endpoints through existing Spring Security and OAuth controls, validating authentication and authorization scenarios with JUnit and Postman API testing before integration.

Projects

GaragePulse — Auto Service Management System | CMU Capstone

- Developed a Java-based garage management system with Spring Boot and MySQL, replacing paper-based workflows by implementing customer CRUD, phone-number search, vehicle details, service-history retrieval, and service-request creation.
- Implemented authentication and role-based access using JAuth and token-based authentication, securely storing hashed passwords in MySQL while identifying logged-in staff across Owner/Admin, Mechanic, and Front Desk roles.

Education

Central Michigan University, Mount Pleasant, MI, USA

Master of Science in Information Systems

07/2024 – 05/2026

Sri Indu College of Engineering & Technology, India

Bachelor of Technology in Electronics and Communication Engineering

07/2017 – 07/2021