

Durga Sahithi Pallapothu

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SUMMARY

- Results-driven Software Developer with hands-on experience in designing and developing scalable, high-performance backend systems using Java, Spring Boot, and AWS.
- Proficient in RESTful API development, microservices architecture, event-driven systems (Kafka, RabbitMQ), and cloud-based deployments using Docker and Kubernetes (EKS).
- Expertise in spring framework modules like Spring Boot, Spring MVC, Spring AOP, Spring IOC, Spring Batch, Spring Data, Spring Cloud, Spring Security, etc.
- Developed the Amazon Inventory Management Service (AIMS) to enable real-time stock tracking, leveraging AWS DynamoDB, Aurora (SQL), and Redis caching, reducing query response times by 50% and enhancing system scalability.
- Implemented Spring Security with JWT authentication and AWS Cognito, ensuring secure access to APIs and role-based authorization for scalable enterprise applications.
- Experienced in implementing event-driven architectures, integrating Kafka and Amazon SQS for real-time communication across distributed services, improving data synchronization and system resilience.
- Adept at system performance optimization, implementing caching strategies (Redis, ElastiCache), query optimization, and database tuning to ensure low-latency responses for high-traffic applications.
- Passionate about building scalable, fault-tolerant applications, leveraging best practices in software design, CI/CD automation, and cloud-native development.

SKILLS

Methodologies: SDLC, Agile, Waterfall, Scrum

Programming Languages: Java, C++, SQL, JavaScript, Python

Database: MySQL, MongoDB, Dynamo DB

Libraries & Frameworks Node.js, React.js, Angular, Spring Boot, Spring MVC, Spring security, Rest API

Tools & Technologies: Postman, GCP, Kubernetes, Docker, LLM's, Kafka, Jira, Git, Jenkins, Maven, Hibernate, Junit, Mockito

Operating Systems: Windows, Linux, iOS

PROFESSIONAL EXPERIENCE

Software Development Engineer | *Amazon India Pvt Ltd* | **Hyderabad, India** | **Aug 2020 – Dec 2022**

- Designed and developed the Amazon Inventory Management Service (AIMS) using Java, Spring Boot, and AWS, ensuring real-time inventory tracking and seamless synchronization across fulfillment centers.
- Implemented RESTful APIs, Amazon DynamoDB (NoSQL), and Amazon Aurora (SQL) to optimize stock management, reducing query response times and improving data consistency.
- Built an event-driven architecture using Kafka and Amazon SQS, enhancing real-time stock updates and reducing processing latency by 40%.
- Improved system performance by integrating Redis caching (ElastiCache) and automating deployments with Docker, Kubernetes (EKS), and AWS Lambda, leading to increased scalability and reliability.

Software Developer | *Knoah Solutions Pvt. Ltd* | **Aug 2018 – Nov 2019**

- Developed a Spring Boot-based Support Ticket Management System, automating ticket categorization, escalation, and resolution tracking, improving response efficiency by 40%.
- Designed and integrated RESTful APIs with CRM tools like Zendesk and Freshdesk, reducing manual ticket assignments and improving customer query resolution times.
- Implemented Kafka-based event-driven architecture to automate SLA-based escalations and proactive ticket handling, minimizing backlog issues.
- Optimized system performance by caching frequently accessed data with Redis, reducing database query load by 50%, and deploying services using Docker and Kubernetes (EKS).

ACADEMIC PROJECTS

Academic Advising Platform: Developed a Spring Boot-based platform for academic advising, enabling seamless interactions between students and advisors. Designed RESTful APIs for advisor registration, session management, and availability tracking, integrating notifications and reminders for upcoming sessions.

Idea Portal: Developed a Spring Boot-based platform for managing user-submitted ideas with role-based access control and approval workflows. Designed the login page, implemented idea submission, approval processes, and developed features to track idea statuses.

Event Management & Ticketing System: Developed a Spring Boot-based event management platform allowing users to create, book, and manage events. Implemented APIs for event registration, payment integration, ticket generation, and role-based access for organizers and attendees, with QR-based check-in support.

AI-Powered Personalized Learning Platform: Built a Spring Boot and React-based e-learning system that personalizes content recommendations based on AI-driven student learning patterns. Developed APIs for course management, student performance tracking, and adaptive quizzes, integrating ML models for dynamic curriculum suggestions.

EDUCATION

Bachelor of Technology in Electronics and Communication Engineering | *GIET College of Engineering – Rajahmundry*

Aug 2014 – Apr 2018

Master of Science in Computer Science | *Texas A&M University-Commerce*

Jan 2023 – Dec 2024