Madhavi Tapela
Java Backend Developer | Microservices | Spring Boot

✉ madhavitapela22@gmail.com | ☎ 8125472696 | ⚙ https://github.com/madhavi191 | 🔗 linkedin.com/in/madhavi29

PROFESSIONAL SUMMARY

Java Backend Developer with 2.5 years of experience in building scalable microservices and high-performance backend systems using Java, Spring Boot, Kafka and MongoDB. Strong in REST API design, multithreading, SQL optimization, and CI/CD automation with Docker and Jenkins. Experienced in financial domain projects, API integration, and secure backend development using Spring Security and JWT.

EDUCATION

B.Tech – Computer Science & Engineering   **May 2018 – 2022 Jun**
Srinivasa Ramanujan Institute of Technology, Anantapur

TECHNICAL SKILLS

- **Programming Languages :** Java 8/11/17, Python (basic), HTML5, CSS, Basic React.js
- **Frameworks & Technologies :** Spring Boot, Spring MVC, Spring Security, JPA/Hibernate
- **Databases :**   Oracle 19c, MySQL, MongoDB
- **Messaging & Streaming :** Apache Kafka (Producer/Consumer, Topics, Partitions)
- **Caching:** Redis (Distributed caching, session management)
- **DevOps & Deployment Tools:** Docker, Kubernetes (K8s), OpenShift ,Jenkins, Maven, GitLab/GitHub, SonarQube
- **Monitoring & Logging:** ELK Stack (ElasticSearch + Logstash + Kibana), Prometheus + Grafana, Splunk, Zipkin (distributed tracing)
- **API & Testing Tools :** Postman, JUnit, Mockito
- **Data Structures & Algorithms :** Arrays,Strings,Linked List,Hashing, Sorting & Searching(Applied in Backend modules)

WORK EXPERIENCE

Java Developer | Tata Consultancy Services (TCS) | Mumbai   **Jun 2023 – Nov 2025**

- Developed and deployed RESTful microservices using Java, Spring Boot, JPA, Hibernate, and automated CI/CD with Docker & Jenkins, reducing release time by 40% and improving stability by 30%.
- Implemented Spring Security with JWT for secure authentication/authorization and integrated external APIs (JSON/XML) for account management and KYC to improve operational efficiency.
- Optimized SQL and MongoDB queries to enhance API performance and improved service-to-service communication using Spring Cloud and centralized configuration.
- Collaborated with QA and DevOps teams in Agile sprints and troubleshot production issues, improving log monitoring and increasing API reliability.

Full-Stack Developer Intern   **Oct 2021 – Dec 2021**
- Designed full-stack applications using Spring Boot, MongoDB, and React.js with user authentication and CRUD operations.
- Participated in debugging, functional testing, and API performance improvements.

PROJECTS

Microservices-Based Expense Tracker   **Jan 20 25 – Mar 2025**
- Designed microservices for Users, Budgets, and Transactions using Spring Boot.
- Implemented Kafka for asynchronous event-driven communication and Spring Cloud Config for centralized configuration.
- Optimized MySQL and MongoDB queries to reduce transaction latency and improve system performance.
- Secured microservices using JWT-based authentication and Dockerized all services for smooth deployment and scaling.

Emotion Speech Recognition System (Academic Project)   **Dec 2021 – May 2022**
- Built a deep learning model using CNN and RNN to classify speech emotions.
- Applied MFCC-based feature extraction, noise reduction, and preprocessing techniques.
- Achieved 98% accuracy on the evaluation dataset.

CERTIFICATIONS

- Introduction to Software Engineering – **IBM (Coursera), 2025**
- Enterprise Application Development with Spring Boot – **TCS Training, 2025**
- Microservices Architecture Using Spring Boot – **TCS Workshop, 2025**

ACHIEVEMENTS

- Streamlined deployment cycle by 40% by designing and implementing automated Docker–Jenkins pipelines, reducing manual intervention and deployment errors
- Enhanced backend reliability and reduced production issues by 30% through code optimization, monitoring, and proactive issue resolution and Developed and delivered high-quality, scalable financial APIs, earning recognition from the team and management.
- Improved application performance and response time by analyzing the bottlenecks and optimizing critical modules and Mentored junior developers on best practices in backend development, testing, and CI/CD processes