Adithya Thirupathi

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Technical Skills

Languages: Java, Python, R, HTML, CSS, JavaScript, JSON, JSPs, REST/SOAP Web Services, XML

Frameworks: Spring, Spring Boot, Spring Batch, React JS, Node JS, Angular

Databases: MongoDB, PostgreSQL, MySQL, Oracle SQL, Redis

Cloud: AWS, Azure

CI/CD: Docker, Kubernetes, Jenkins

Version Control: GitHub, Git

Testing Quality: JUnit 5, Mockito, Selenium, SonarQube, ESLint, Prettier, Jest, Supertest, Cypress

Tools & Visualization: Hibernate ORM, Maven, Jira, Confluence, Microsoft Office, Tableau

Experience

Software Engineer, **PNC Bank** – MI, USA   October 2024 – Present

- Worked on transforming legacy banking systems into a modern cloud-native microservices ecosystem, developing RESTful APIs with Java and Spring Boot, building responsive React.js frontends, and deploying solutions on AWS and Azure, which reduced infrastructure costs by approximately $500k+ through optimized cloud resource utilization.
- Worked on developing Admin Portals for Internal Operations Management for customer accounts management, handling loan applications, and processing credit card requests using Java, Spring Boot, RESTful APIs, React.js, PostgreSQL, Docker, Kubernetes, and AWS cloud infrastructure (EKS, RDS, S3) for high availability and scalability.
- Optimized database performance and implemented data access layers using Spring Data JPA, Hibernate, PostgreSQL, and Redis caching, designing efficient database schemas, implementing connection pooling, and query optimization techniques that improved application response times by 40% and reduced database load by 30%.
- Collaborated with cross-functional teams including product managers, UX designers, DevOps engineers, and QA testers using Agile/Scrum methodologies, conducting daily standups, sprint planning, and retrospectives while maintaining detailed documentation. in Confluence and tracking work items in JIRA.
- Collaborated with QA engineers to author automated integration and end-to-end tests using JUnit, Mockito, and Selenium, improving release stability and reducing production defects by 25%.

Software Engineer, **Infosys** – Hyderabad, India   June 2019 – June 2023

- Actively contributed to developing multiple high-performance e-commerce microservices, including Pricing, Subscription, Catalog, and Ratings and Reviews, ensuring seamless scalability, efficiency, and integration within a dynamic microservices architecture. These microservices were successfully integrated with clients' existing websites, improving functionality and user experience.
- Implemented feed functionality in microservices like promotion and catalog using Spring Batch Processing in the Infosys Equinox Platform. This enabled clients to efficiently upload thousands of promo codes and products simultaneously and generate bulk promo codes.
- Identified and resolved critical production issues, such as compatibility challenges after Java version upgrades, by debugging production deployments and coordinating hotfix rollouts, ensuring low bugs in the environment.
- Mentored junior developers in best practices for CI/CD with Jenkins pipelines and Git branching workflows, accelerating team onboarding and knowledge sharing.
- Partnered with cross-functional teams (QA, DevOps, and product owners) in an Agile/Scrum environment to define requirements, develop technical solutions, and deliver the sprint backlog items.

Education

Central Michigan University, MI   August 2023 - May 2025
Master of Science in Information Systems – GPA: 3.7/4.0

Mahatma Gandhi Institute of Technology, Hyderabad, India   August 2016 - May 2020
Bachelor of Technology in Electrical and Electronics Engineering – GPA: 6.26/10

Projects

Service Hub

- Developed ServiceHub, a web-based platform for booking home services. Implemented user authentication, service search, and booking with role-based access. Built using Python, MySQL, HTML, CSS, and JavaScript, featuring an admin dashboard and location-based provider search.

Student Management System

- Developed a secure REST API in Spring Boot and Spring Data JPA to manage student records, courses, and enrollments; enforced input validation and exception handling to ensure data integrity.
- Employed Postman and Swagger for API testing and documentation, for testing the performance of the API's developed.

Weather Application

- Built a React.js Weather App integrating a weather API for real-time location-based updates. Designed a responsive UI with dynamic temperature, weather icons, and CSS styling. Optimized API calls for efficient data retrieval and performance.

Economic Poverty Trends Visualization using Tableau

- Developed an interactive Tableau dashboard to analyze global, regional, and national poverty trends using population, poverty indicators, and literacy rate data. Leveraged filters, parameters, calculations, and LOD expressions to enhance interactivity and insights. Visualized global poverty patterns, the poverty-literacy link, and regional disparities, highlighting key improvements and areas needing attention by clear data storytelling.

Product Sentiment Analysis

- Performed data analysis in R programming language using the AFINN lexicon to process and score over 13,500 customer comments from eight boutique parlors and three production sites. I analyzed the most common comments and the overall sentiment of those comments, also identified the customers with top positive sentiment, top parlor and production sites with positive sentiment, I delivered clear, data-driven insights that guided strategic flavor roll-outs and targeted customer loyalty programs, demonstrating the impact of sentiment analytics on product differentiation and engagement.

Certifications

- Lean Six Sigma Green Belt
- Ethical Hacking From Scratch (Udemy)
- Java (Udemy)