

Ashwitha Reddy Nimmala

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PROFESSIONAL SUMMARY

Full Stack Developer with over 3 years of experience in designing and delivering scalable, end-to-end web applications. Skilled in building robust backend systems using Java, Spring Boot, and RESTful APIs, along with developing responsive front-end interfaces using React.js and TypeScript. Proficient in deploying cloud-native solutions on AWS, including services like EC2, Lambda, S3, and API Gateway. Experienced in microservices architecture, third-party API integrations, and real-time features using WebSockets. Strong grasp of software engineering best practices, Agile development, and CI/CD pipelines. Adept at problem-solving, system design, and ensuring performance, security, and maintainability across projects. Passionate about delivering clean, efficient code and seamless user experiences.

TECHNICAL SKILLS

Programming Languages	Java, Python, Java script
Backend	Java, Spring Boot, Spring MVC, Hibernate, JPA, RESTful APIs, JWT, OAuth2, Microservices Architecture
Frontend	React.js, Redux, React Router, TypeScript, Axios, Bootstrap , Tailwind CSS, Html
Databases	PostgreSQL, MongoDB, My SQL, Microsoft SQL Server
Cloud & DevOps	AWS (EC2, S3, Lambda, RDS), Docker, Kubernetes, GitHub Actions, Jenkins, CI/CD Pipelines
Version Control	Git, Github, Bit bucket
Tools and Platforms	IntelliJ IDEA, VS Code, Eclipse, Maven, Gradle, Postman
Methodologies & Design Patterns	Agile, Scrum, Waterfall, Test-Driven Development (TDD), MVC, Singleton, DAO, DTO
Messaging and Server Technologies	Apache Kafka, RabbitMQ, JMS, Tomcat, RESTful Services, SOAP
Testing	Junit, Mockito, Postman

EXPERIENCE

Fifth third bank

Full Stack Engineer

April 2024-present

United States

- Designed and developed scalable RESTful APIs and backend microservices using Java, Spring Boot, JPA, and Hibernate, improving modularity and reducing database query latency by 35% through optimized data access and caching techniques.
- Engineered robust front-end interfaces using React.js, Redux, and TypeScript, building reusable UI component ensuring cross-browser compatibility and mobile responsiveness.
- Integrated PostgreSQL and MongoDB for structured and semi-structured data storage, applying indexing strategies and query optimization for efficient data retrieval and high availability.
- Deployed containerized microservices using Docker, orchestrated with Kubernetes, and hosted on AWS EC2 and Elastic Beanstalk, enabling scalable infrastructure and automated fault recovery.
- Leveraged AWS services such as S3 for object storage, RDS for managed database hosting, and Lambda for serverless execution of background tasks and scheduled jobs.
- Implemented secure user authentication and authorization using OAuth2, JWT, and Spring Security, establishing granular role-based access controls and aligning with enterprise-grade security policies.
- Built asynchronous messaging workflows using Apache Kafka and RabbitMQ, decoupling services and enabling real-time communication across distributed modules with fault tolerance and retry logic.
- Automated the complete CI/CD pipeline using GitHub Actions, AWS Code Pipeline, and Jenkins, integrating testing, linting, containerization, and deployment stages, reducing manual errors and speeding up releases by 40%.
- Developed and maintained automated test suites using JUnit, Mockito, and Postman, achieving 85%+ test coverage and minimizing production-level defects through rigorous regression and integration testing.
- Participated in Agile development cycles, collaborating closely with product managers, UX designers, and QA engineers, contributing to sprint planning, peer code reviews, retrospectives, and delivering high-priority features within deadlines

Deloitte

Java Developer

January 2022– August2023

Hyderabad, India

- Led the full development cycle of scalable microservices using Java Spring Boot, with REST APIs via Spring MVC, and optimized data handling using Hibernate and JDBC, reducing API response time by 50% through Redis and Memcached caching.
- Built containerized services using Docker, deployed using Kubernetes, improving scalability and cutting downtime by 20%. Automated CI/CD with Jenkins, GitHub Actions, Terraform, and AWS Code Pipeline, reducing integration failures by 35%.

- Developed asynchronous workflows using AWS Lambda and DynamoDB Streams, scripted in Python and Java, reducing manual work by 60% and improving database update efficiency by 90%.
- Implemented secure user authentication using Spring Security, OAuth2, and JWT, and added data encryption via AWS KMS to boost security compliance.
- Designed event-driven systems using Apache Kafka and AWS SQS for fault-tolerant and scalable asynchronous communication between services.
- Created automated testing frameworks with JUnit, Mockito, and Selenium, increasing test coverage by 30% and cutting defect rates—ensuring reliability in global API launches.
- Improved system observability using AWS CloudWatch, Prometheus, OpenTelemetry, and AWS X-Ray, reducing time to resolve incidents.

ACADEMIC PROJECTS

Hospital Management System

- Developed a full-stack hospital management system with separate dashboards for Patients, Doctors, and Admins. Patients can book and cancel appointments dynamically. Doctors can manage their schedules and view patient details Admins can manage all users, departments, and doctor availability.
- Implemented secure authentication using JWT tokens and role-based access control; integrated 2FA via email-based OTP for added login security.
- Used DTOs and Bean Validation to ensure clean API responses and safe request handling across all endpoints
- Managed real-time slot availability, dynamically filtering booked time slots and preventing overlaps during appointment creation.
- Applied modular backend structure with Controller-Service-Repository layers, following RESTful practices and custom exception handling.
- Built reusable React components with proper state management, conditional rendering, and protected routes based on user roles.
- Optimized frontend UX using controlled forms, dynamic error handling, and responsive UI design across devices.
- Handled secure credential storage with .env, maintained clean Git workflows, and followed component-based architecture in React.

Movie Recommendation System

- Built a hybrid recommendation system combining collaborative and content based filtering .
- Increased the accuracy by 15%
- Backend in r and front end using streamlit
- Optimized over 100k movie ratings with reduce response time by 30%

CERTIFICATIONS

- Object Oriented with Java- coursera
- Introduction to Cloud Computing- coursera

EDUCATION

Master of Science in Engineering Data Science(Aug 2023-May 2025)

University Of Houston CGPA(3.93/4)

Bachelor of Engineering in Information Technology(Aug 2019-May 2023)

Malla Reddy Engineering College For Women CGPA(9.14/10)