

Vasanth Modepalli

Java Backend Developer | 3.7 Years Experience

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[LinkedIn](#) | [GitHub](#) | [Portfolio](#)

PROFESSIONAL SUMMARY

Java Backend Developer with 3.7 years of experience building, supporting, and automating backend systems for large-scale government tax platforms. Experienced in Java, Spring Boot, REST APIs, Oracle SQL, PL/SQL, backend automation, data reconciliation, production debugging, and external service integrations. Built automation for missed ITR verification-feed processing, handling 4k-5k records in under 5 minutes and replacing repetitive manual Postman-based operations.

TECHNICAL SKILLS

Languages: Java 8/17, SQL, PL/SQL, Python

Backend: Spring Boot, Spring MVC, REST APIs, Microservices, Hibernate, Spring Data JPA, FastAPI

Databases: Oracle Database, MySQL, PostgreSQL, Redis

Tools: Git, Postman, Maven, IntelliJ IDEA, Docker, Linux, Cron Jobs

Concepts: Backend Automation, Data Reconciliation, API Integration, SQL Optimization, Production Debugging, RCA, JSON Payload Processing

PROFESSIONAL EXPERIENCE

Infosys Ltd.

Jan 2024 - Present

Senior Systems Engineer

Bangalore, India

- Worked on backend modules for the Indian Government Income Tax Portal, supporting taxpayer-facing workflows involving ITR submission, verification, refund-related communication, and downstream data exchange.
- Built an automated reconciliation utility using Python and Oracle SQL to identify verified ITR submissions where downstream verification feeds were not shared successfully, generate JSON payloads from database records, and trigger feed submission through an existing interface.
- Processed approximately 4k-5k missed verification-feed records through the automation flow, reducing execution time to under 5 minutes and replacing repetitive manual Postman-based submission activity.
- Converted the reconciliation automation into a FastAPI-based internal utility and shared it with the team, enabling reusable feed processing without manual payload preparation.
- Automated an internal data-processing workflow that reduced execution time from approximately 90 minutes to under 10 minutes, improving operational efficiency and reducing manual error risk.
- Configured and onboarded 22 taxpayer email notification templates in an existing communication microservice using DB-backed FreeMarker HTML templates, dynamic JSON payload mapping, and Zebra email service integration.
- Investigated production issues involving feed-delivery failures, data mismatches, API payload problems, and database-level inconsistencies by analyzing SQL records, interface behavior, and backend application flow.
- Optimized SQL queries and stored procedures in backend modules, improving data retrieval performance by approximately 25 percent during high-usage windows.

Infosys Ltd.

Nov 2022 - Jan 2024

Systems Engineer

Bangalore, India

- Maintained backend stability for critical income-tax portal modules, supporting production workflows during high-volume filing periods.
- Performed root cause analysis for transaction failures and backend data issues, working across Java service logic, database records, and external interface payloads to identify permanent fixes.
- Supported REST API testing, payload validation, database verification, and production issue resolution using Postman, SQL, logs, and internal debugging workflows.

KEY PROJECT

Scalable URL Shortener Service

Java 17, Spring Boot 3, MySQL, Redis, Docker

- Built a RESTful URL shortener backend using Java 17 and Spring Boot, generating compact short aliases using Base62 encoding.
- Integrated Redis caching to reduce repeated database reads for frequently accessed short URLs and improve redirection performance.
- Implemented URL analytics to track click count, referrer details, and timestamp-based access data for user-facing metrics.
- Added DTO validation and centralized exception handling to improve API reliability and maintain cleaner service-layer logic.
- Containerized the application using Docker for consistent local and deployment environments.

EDUCATION

Bachelor of Technology in Mechanical Engineering

2018 - 2022

Sasi Institute of Technology and Engineering

CERTIFICATIONS & ACHIEVEMENTS

- Infosys Certified Spring Boot Developer | Infosys Certified Java SE8 Developer
- Solved 150+ DSA problems on LeetCode