Srusti Samprada Pradhan

Technical Skills

Programming Languages: Java, JavaScript IDEs: Eclipse, Apache NetBeans, STS, VS Code

Frameworks: Spring, Spring Boot, Hibernate, Node.js Tools: GitHub, Gitlab, Postman

Databases: MySQL, PostgreSQL, MongoDB

Others: AWS, HTML, CSS, Java Swing, AWT, Agile, Thymeleaf

Work Experience

Tummoc (Software Engineer)

Jan 2023 - Present

Automated Fare Collection System(AFCS)

Jan 2025 - Present

- Developed and exposed **REST API**s to external clients for secure data transmission, ensuring strict adherence to required data formats and reducing unnecessary data duplication and key mismatches by 95%.
- Implemented AES encryption and decryption using PBKDF2WithHmacSHA1 and Base64 to secure API communication and protect sensitive data.
- Prevented SQL injection through input validation and parameterized queries, enhancing system security.
- Consumed client APIs and used **batch updates** to insert transactional data into **MySQL**, optimizing performance.
- Designed and implemented resilient, non-blocking operations with **automatic retry logic** and **transactional** integrity, ensuring reliable execution and data consistency in asynchronous workflows.

Intelligent Transport Management System (ITMS)

Oct 2023 - Jan 2025

- Developed a centralized Spring Boot microservices application for STUs, improving operational efficiency by 20% and streamlining multi-system management.
- Created a comprehensive API to automatically set permissions and roles by scanning application controllers, reducing manual configuration time by 80%. This ensured accurate role-based access across 50+ modules and simplified permission management with a single URL trigger.
- Leveraged **REST controllers** and **AJAX** to enable dynamic data updates, reducing page reloads by 100% and improving processing time by 50%, significantly enhancing user experience and efficiency
- Managed authentication and authorization for different accounts. Developed custom annotations for role-based permissions, ensuring secure module access according to user roles and maintaining system integrity, reducing unauthorized access attempts by 90%.
- Implemented **Prometheus** monitoring to track application performance, resource usage, and custom metrics, enhancing system observability and reliability.

Intelligent Depot Management System (IDMS)

Jan 2023 - Sept 2023

- Developed a dual-application system: a **Java Desktop Application** for localized sub-organizational functions (15% efficiency boost) and a Web Application for organization-wide operations (20% efficiency gain).
- Enhanced offline functionality with a desktop app, reducing internet dependency by 90% and boosting offline efficiency.
- Migrated data storage from JSON files to MongoDB, optimizing data management and reducing complexities in data handling.

Projects

CRM- CRMAPP

- CRM is a marketing software that manages your relationship with the customer. This software ensures that every step of the interaction with customers goes smoothly and efficiently to increase the overall profit.
- It Actively tracks and manages custom information. Actively tracked and managed custom information, including Leads, Clients, Proposals, ensuring a streamlined customer relationship management process.

Education

Gandhi Institute For Technology (BPUT)B.Tech , Computer Science - June 2022
Overall SGPA: 8.9

Jupiter +2 Science College (CHSE) Higher Secondary - April 2018 Overall Grade: 81%

Certifications AWS Technical Essential Software Development