

SWAPNIL TIWARI

Software Engineer | Backend Java Developer

+91-8959594444 | swapniltiwari.work@gmail.com | <https://github.com/tiwari-swapnil> | [linkedin.com/in/swapnil-tiwari-929195220](https://www.linkedin.com/in/swapnil-tiwari-929195220)

PROFESSIONAL SUMMARY

Backend Java Developer with 2 years of experience designing and developing Spring Boot microservices and embedded applications across Access Control, Guest Room Management Systems (GRMS), Property Management Systems (PMS), Point-of-Sale (POS), and IoT domains. Hands-on experience with Java, Spring Boot, Microservices, REST APIs, MQTT, AWS IoT Core, socket programming, serial communication, and SQL, building scalable and production-ready backend solutions for real-world operational workflows.

TECHNICAL SKILLS

Technologies: Java, SQL, Spring Boot, Microservices, REST APIs, GraphQL, MQTT, Socket and Serial Programming

Tools: Maven, Jenkins, Postman, Swagger, Apache JMeter, JIRA, Linux, Git, Bitbucket, MySQL workbench

Domains: IoT, Healthcare, Hospitality, Smart Homes, Automations

PROFESSIONAL EXPERIENCE

Software Engineer — DigiValet

July 2025 – Present

- Engineered PMS integrations, including Oracle OPERA, supporting 5,000+ guest transactions across 30+ hotel properties and streamlining check-in/check-out workflows.
- Enhanced and integrated POS platforms including Symphony, WinHMS, and Silverware, processing 10,000+ orders daily across 30+ properties while improving billing and order-processing efficiency.
- Architected integrations for GRMS, music systems, valet boxes, soundbars, amplifiers, and smart devices using socket programming and serial communication, enabling centralized device control across 25+ properties.
- Optimized 10+ production Spring Boot microservices through thread-pool, database-timeout, and connection tuning, while remediating vulnerabilities and upgrading dependencies; reduced memory usage from 1.5 GB to 800 MB (~47%).
- Built a scalable hospital meal-ordering platform with complex dietitian and allergy workflows, supporting consistent operations across 26 UTC time zones.
- Integrated the Instagram API for secure authentication and communication, enabling property-level brand promotion and social media integration.

Software Engineer Trainee — DigiValet

Jan 2025 – June 2025

- Designed and developed a Spring Boot microservice as a pass-through layer for Smart Area Access Control, supporting multiple guest access profiles and integrating Salto Access Control via SHIP protocol.
- Integrated AWS IoT Core with MQTT for secure cloud-to-on-premises communication, eliminating IP whitelisting and simplifying connectivity and operational data exchange.

KEY PROJECTS

Meal Ordering Service

- Spring Boot microservice automating hospital meal operations with menu management, patient ordering, kitchen dashboard integration, and dietary restriction tracking.

Multi-Protocol Communication Service

- Spring Boot microservice that acts as a versatile communication gateway that abstracts and manages multiple protocol interactions including HTTP REST APIs, MQTT messaging, TCP sockets, and third-party protocols.

Property Management Service

- Spring Boot microservice integrated with Oracle OPERA PMS that automates hotels operations by facilitating automated guest profile management, check-in/check-out workflows, and service charge posting between hospitality systems.

EDUCATION

Bachelor of Technology (Computer Science) — SVVV, Indore (2021 – 2025)