

# SASMITA LENKA

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## PROFESSIONAL SUMMARY

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Full Stack Developer with 4+ years of experience specializing in Java, Spring Boot, Microservices, and React.js. Proven expertise in designing and developing scalable, high-performance transactional systems and responsive web applications. Strong background in secure payment integrations, including NPCI-compliant systems, ISO 8583 messaging within large-scale distributed architectures. Experienced in RESTful API design, frontend-backend integration, and modern DevOps practices using Docker, Kubernetes and CI/CD pipelines.

## TECHNICAL SKILLS

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**Languages & Frameworks:** Java, Spring Boot, JavaScript, React.js, SQL

**Backend Technologies:** RESTful Web Services, Microservices Architecture, API Development

**Databases:** PostgreSQL, MySQL, MongoDB, Redis

**DevOps & Cloud:** Docker, Kubernetes (HPA), Jenkins, CI/CD Pipelines

**Monitoring:** Grafana, Prometheus

**Payment Systems:** ISO 8583, AEPS, BBPS, MATM, POS, NPCI, UIDAI, PCI-DSS

**Security:** AES-256 Encryption, HSM Tokenization, Mutual SSL, HMAC Validation

## PROFESSIONAL EXPERIENCE

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**Module Lead** | IServeU Technology Pvt. Ltd., Odisha, India

*Nov 2022 – Present*

- **Backend Architecture & System Optimization:** Designed and built scalable backend systems for AEPS, MATM, POS, and BBPS using Java, Spring Boot, and microservices architecture, ensuring modularity and high transaction throughput.
- Refactored core transaction modules to improve throughput by ~40%, reducing latency by ~30% and doubling deployment velocity. Supported over 2 million daily transactions with high concurrency handling.
- **Secure Payment API Development:** Built secure, scalable API services for financial transactions compliant with NPCI, UIDAI, and PCI-DSS standards, supporting real-time routing and switching via ISO 8583 message structures.
- **Kubernetes Migration & Cost Efficiency:** Migrated services from static environments to Kubernetes with autoscaling (HPA) and resource tuning, achieving ~30% reduction in cloud infrastructure costs.
- **CI/CD Automation & DevOps:** Implemented Jenkins pipelines to automate deployments for Dockerized microservices, enabling consistent rollout across development, staging, and production environments.
- **Security & Compliance:** Enforced mutual SSL, encrypted database communication, and fine-grained access controls across microservices. Managed HSM-encrypted key workflows ensuring 100% audit compliance with financial regulations.
- **Team Leadership & Agile Execution:** Led a team of backend engineers, conducted code reviews, coordinated sprint execution, and achieved 100% on-time delivery of sprint goals across high-impact backend releases.

**Software Engineer Intern** | IServeU Technology Pvt. Ltd., Odisha, India

*April 2022 – Nov 2022*

- Contributed to development of core backend services for MATM and POS systems using microservices architecture and ISO 8583-based transaction flows.
- Gained hands-on experience in integrating payment APIs, configuring cloud environments, and supporting real-time transaction handling.

## KEY PROJECTS

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### 1. MATM (Micro ATM) Service

Developed a secure Micro ATM backend enabling banking correspondents to perform cash withdrawal, balance inquiry, and mini statement services via handheld terminals using debit/credit cards and PAN details.

- Exposed secure APIs integrating with bank switch systems and NPCI using ISO 8583 standards.
- Implemented dynamic bank routing logic based on NPCI responses to increase transaction success rates.
- Secured sensitive data (card numbers, terminal IDs) using AES-256 encryption/decryption protocols.

### 2. POS (Point of Sale) Payment System

Led backend development of a POS platform enabling merchants to accept debit/credit card payments via mPOS terminals with real-time validation and secure processing through multiple banking partners.

- Designed REST APIs for transaction routing via bank switches using ISO 8583 messaging.
- Built a Switch Handler Module for routing through NSDL, IPPB Bank, and others.
- Implemented secure card data handling using AES encryption and HSM-based tokenization.
- Parsed and constructed ISO 8583 messages dynamically to support multi-bank and NPCI interoperability.

### 3. AEPS (Aadhaar Enabled Payment System)

Implemented backend modules for AEPS enabling Aadhaar-based financial transactions through biometric authentication (fingerprint) for cash withdrawal, balance inquiry, and DBT operations.

- Developed biometric authentication module using RD Services (Mantra, Morpho) per UIDAI norms.
- Built secure PID block processing and device certification flows.
- Ensured biometric data security with HMAC validation and encryption mechanisms.

### 4. BBPS Biller Service (Bharat Bill Payment System)

Architected the Biller Service module for BBPS enabling real-time utility bill payments (electricity, telecom, DTH) via APIs integrated with NPCI's BBPS platform.

- Developed microservices for biller discovery, input validation, payment initiation, and settlement.
- Integrated with NPCI BBPS APIs to fetch biller lists, validate customer accounts, and confirm payment status.
- Optimized performance and scalability through asynchronous processing and modular design.

## EDUCATION

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