ABHILASH REDDY POTHIREDDY

Email: abhilashreddy3123@gmail.com | Mobile: +1 (321) 316-1531|LinkedIn: www.linkedin.com/in/abhilash-reddy-pothireddy-4a4420281

EDUCATION

UNIVERSITY OF CENTRAL FLORIDA   Aug 2024 - Present
Master of Science in Computer Science   **GPA**: 4

SKILLS

Programming Languages: Python, Java, JavaScript, SQL
Frontend: React.js, Redux, Next.js, DOM Manipulation
Backend: Node.js, Express.js, REST APIs, Spring Boot, Spring Security
Cloud Platforms & DevOps: AWS (EC2, S3, Lambda, ECS), Docker, Terraform
AI/ML: Applied ML, Generative AI (RAG, synthetic data), Agentic systems
Development Skills: Microservices, Data Structures
Databases: PostgreSQL, SQL, MongoDB, DynamoDB, Hibernate
Messaging & Caching: Kafka, Redis
Tools & Practices: Git, Agile/Scrum, Unit Testing, Code Reviews, MS Office

EXPERIENCE

Software Developer Intern — Tech.at.core (India)   April 2023 – June 2024
- Developed and maintained full-stack applications using React.js (frontend) and Node.js (backend), improving system efficiency by 20%.
- Designed and optimized Express.js and Spring Boot RESTful APIs, reducing data retrieval latency by 25%.
- Built Spring Data JPA repositories to streamline database integration and enable efficient CRUD operations.
- Implemented secure authentication with JWT and Spring Security, ensuring robust access control and data protection.
- Increased user engagement by 30% with responsive and intuitive UI designs (Tailwind CSS).
- Automated CI/CD pipelines with Git and GitLab, reducing deployment errors and improving delivery speed by 15%.
- Developed middleware for error handling and logging, enhancing debugging efficiency and system reliability.
- Collaborated cross-functionally in an Agile environment, contributing to iterative product improvements and faster release cycles.

PROJECTS

PayVault - Secure Digital Wallet Platform (Java | Spring Boot | MySQL | Redis | Kafka)   March 2024
- Engineered financially correct money movement with 0 balance drift by implementing double-entry ledger accounting and deriving balances from credits/debits using Spring Boot + MySQL + JPA.
- Hardened authentication and session security by ~90% by rotating refresh tokens, enforcing RBAC, tracking device sessions, and applying brute-force protection using Spring Security + JWT + Redis.
- Prevented duplicate transfers under retries and network failures by enforcing idempotency keys and transactional guarantees using MySQL unique constraints + Redis + service-layer transactions.
- Accelerated transaction processing and fraud detection workflows by ~40% by decoupling risk checks, notifications, and state transitions using event-driven architecture with Kafka (or RabbitMQ) + outbox pattern.

SecureShop – Security-Driven E-Commerce Platform (Java | Spring Boot | Spring Security | JWT | MYSQL)   Dec 2023
- Strengthened platform security and access isolation by ~90% by implementing JWT authentication with refresh token rotation, device-bound sessions, and RBAC with permission-level enforcement using Spring Security + JWT + MySQL.
- Prevented unauthorized refunds and horizontal privilege escalation across all workflows by enforcing ownership checks and method-level authorization on checkout, order, and admin APIs using @PreAuthorize + Spring AOP + JPA.
- Improved transactional reliability and data integrity under concurrent checkout flows by implementing DB-backed idempotency keys, optimistic/pessimistic locking, and atomic order state transitions using MySQL + JPA/Hibernate + Spring transactions.
- Enabled full auditability and compliance readiness with zero business-logic coupling by capturing immutable audit trails for authentication, refunds, and admin actions using Spring AOP + Flyway-managed schemas.

CERTIFICATIONS
- Cloud Computing Foundation – Wipro