

Custom Software Engineer with 3 years of experience in Java application development, design, and configuration. Skilled in Java, Python, and backend development, with strong expertise in object-oriented programming, application frameworks, and database management systems. Experienced in independently delivering solutions, collaborating with cross-functional teams, and contributing to business process automation. Proficient in cloud computing (AWS), CI/CD pipelines, and DevOps methodologies, with a proven ability to deliver scalable, reliable, and high-performance applications.

WORK EXPERIENCE

Jio Platforms Limited – Software Development Engineer

Bengaluru, Karnataka | July 2023 – June 2025

Automation and DevOps

CI Automation for Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM-KUSUM)

- Implemented CI/CD pipelines using Jenkins, Git, and Shell scripting to automate build, integration, and deployment workflows, enabling the reverse command mechanism from the web portal to IoT devices.
- Configured and optimized pipelines with Python and Docker, reducing manual release effort by 30% and ensuring consistent firmware delivery and application updates across environments.
- Integrated automated testing frameworks (JUnit, custom Python scripts) within the CI/CD pipeline, improving defect detection by 40% and accelerating QA cycles by 25%.
- Deployed and monitored large-scale FOTA (Firmware Over-The-Air) updates via server to mass IoT devices, with real-time SMTP notifications, increasing deployment reliability and reducing downtime.

Development - Clean Energy Sector

- Implemented secure SFTP pipelines for automated file exchange between remote Linux servers and local systems, ensuring reliability and efficiency.
- Engineered Bluetooth Low Energy (BLE) GATT profiles for advertisement, pairing, connection management, and data transfer, enabling seamless and stable device communication.
- Designed and optimized file pooling mechanisms using record/file locking, lseek for I/O positioning, and file system mounting/unmounting, with strict thread safety and deadlock prevention via mutex-based synchronization.
- Developed Connectivity Monitoring Object API per OMA LwM2M standards, reducing server load by ~10% and enhancing real-time monitoring.
- Implemented AES-128 encryption for secure pre-shared key (PSK) management in client-server bootstrap processes.
- Optimized Sleep API, DNS/DTLS/LwM2M retry mechanisms, and Secure Boot (Flashing/FOTA) for improved system stability, security, and performance.

SKILLS

Languages & Databases C, Java, Python, Linux, MySQL, MongoDB, Data Structures, Algorithms

Cloud & DevOps AWS, Terraform, Docker, Kubernetes (K8s), Jenkins, Git, CI/CD, DevOps Automation

ACHIEVEMENTS AND CERTIFICATES

- Jio Star Performer: Learning Champion Award (FY 2024-25)
Ensured smooth customer releases of Solar Pump products through strong ownership.
- IBM Introduction to Cloud Computing certification 2025
- IBM Introduction to DevOps certification 2024
- University of Michigan: Python for Everybody Specialization 2021

KEY PROJECTS

Academic Project – Enterprise Inventory Management System (Spring Boot, MySQL, Microservices, Java)

2025

- Designed and developed a scalable Enterprise Inventory Management System using Java Spring Boot microservices architecture, implementing RESTful APIs to automate inventory tracking and order processing, reducing manual data entry by 65%.
- Deployed modular microservices using Spring Cloud for service discovery, MySQL for relational database management, Hibernate ORM for data persistence, and JWT-based authentication for secure access control—ensuring high availability and fault tolerance.
- Implemented robust backend services using Java 8+, Spring Data JPA, and Maven for dependency management, supported with JUnit/Mockito unit tests, following OOP principles and design patterns for maintainable, scalable code.
- Tech Stack: Java, Spring Boot, Spring Cloud, MySQL, Hibernate, RESTful APIs, Microservices, Maven, JUnit, JWT, Git

EDUCATION

B.E. in Computer Science and Engineering, MS Ramaiah Institute of Technology, Bengaluru

2019 - 2023