

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