

Nilesh Singh Rajput

Backend & DevOps Engineer

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Backend & DevOps Engineer with 3 years of experience in backend development, microservices architecture, and cloud-native infrastructure. Skilled in Java, Spring Boot, Python, and RESTful APIs, with strong expertise in AWS (EKS, RDS, S3, VPC, IAM), Kubernetes, and distributed systems. Experienced in managing CI/CD pipelines and supporting 6M+ IoT devices in production. Proficient in Terraform, Docker, containerization, monitoring (Prometheus, Grafana), and infrastructure security, with a proven ability to deliver scalable, resilient, and high-performance solutions across both backend engineering and DevOps.

SKILLS

Languages & Backend	Java, Spring Boot, Python, Bash, RESTful APIs, MySQL, RDS, Microservices
Cloud & DevOps	AWS (EKS, S3, VPC, IAM), Terraform, Kubernetes, Docker, Jenkins, CI/CD, Prometheus

WORK EXPERIENCE

Jio Platforms Limited – Software Development Engineer

Bengaluru, Karnataka | July 2023 – June 2025

Backend Engineering and DevOps

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

- Designed and developed RESTful APIs and backend services using Java, Spring Boot, and microservices architecture to automate build, integration, and deployment workflows for IoT devices.
- Implemented CI/CD pipelines using Jenkins, GitHub Actions, and Docker, reducing manual release effort by 30% and ensuring consistent containerized deployments across AWS 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 alerting, increasing deployment reliability and reducing downtime.

Infrastructure & Cloud Engineering - Clean Energy Sector

- Architected AWS infrastructure (EC2, RDS, S3, VPC, IAM) with Terraform for automated infrastructure provisioning between cloud and local systems.
- Managed and optimized Kubernetes (EKS) clusters and containerized workloads using Docker, enabling seamless and scalable microservices deployment and orchestration.
- Designed and optimized monitoring solutions using Prometheus, Grafana, and ELK stack, with strict performance tracking and proactive alerting via real-time dashboards.
- Developed Connectivity Monitoring Object API per OMA LwM2M standards, reducing server load by ~10% and enhancing real-time monitoring.
- Configured firewalls, networking, and infrastructure security policies for secure VPC and IAM management in AWS environments.
- Automated Bash/Python scripts for infrastructure automation, blue/green deployments, and zero-downtime rollouts for improved system reliability and performance.

KEY PROJECTS

Academic Project – Cloud-Native Microservices Platform (AWS, Kubernetes, Spring Boot)

2023

- Architected a scalable microservices backend on AWS Cloud, leveraging Java, Spring Boot, and RESTful APIs to build distributed services, reducing deployment time by 60%.
- Deployed on AWS using Amazon S3 for storage, RDS for database, EKS (Kubernetes) for container orchestration, Docker for containerization, and Terraform for IaC provisioning.
- Implemented CI/CD pipelines with Jenkins, GitHub Actions, Prometheus, and Grafana for monitoring, integrated with VPC/IAM for infrastructure security.
- Tech Stack: Java, Spring Boot, AWS (EKS, S3, RDS), Kubernetes, Docker, Terraform, Jenkins, Prometheus

CERTIFICATIONS

• 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

EDUCATION

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

2019 - 2023