

# MADHUKANT SINGH RAJPUT

## DevOps Engineer



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### JOB OBJECTIVE

Results-driven and dedicated professional, leveraging expertise in **Python development, DevOps practices, and cloud computing** to contribute to the growth of a forward-thinking organization. Aiming to design scalable, secure, and efficient systems while **driving technological innovation, optimizing workflows, and ensuring seamless integration of backend processes**. Seeking an opportunity to grow professionally while **delivering high-availability solutions and enhancing operational efficiency** in a dynamic, cloud-driven environment.

### CORE COMPETENCIES

Python Development & Backend Development  
API Integration & System Integration  
Cloud Computing & Cloud Infrastructure Management  
DevOps Practices & CI/CD Pipeline Automation  
AWS Architecture & Multi-Region Architecture Design  
Containerization & Docker  
Workflow Automation & System Scalability  
High Availability Solutions & Cloud Security  
Secure Database Management & Data Security  
API Security & Role-Based Access Control  
Enterprise Application Development & Load Balancing  
VPC Configuration & Route 53 Configuration  
Cross-Functional Collaboration & Agile Project Management  
Cloud Platform Integration & DevOps Strategy

### SOFT SKILLS

Collaborative Teamwork  
Advanced Time Management  
Exceptional Interpersonal Skills  
Leadership Competence  
Effective Decision-Making  
Analytical Problem-Solving  
Critical Thinking

### EDUCATION & CREDENTIALS

- 2024 | B. Tech in Computer Science and Engineering (CSE)** | Dr. A.P.J. Abdul Kalam Technical University | 65%
- 2020 | Diploma in Computer Science** | Sai Nath University, Varanasi, U.P. | 71.8%
- 2017 | Secondary School Certificate (SSC)** | R.P.S. Public School (Affiliated to CBSE), Muzaffarpur, Bihar | 8.2 CGPA

### PROFILE SUMMARY

- Experienced Python Developer & DevOps Engineer** with a strong background in cloud computing, backend development, and API integration, proficient in designing and implementing scalable systems.
- Proficient in Python, Django, and MySQL**, with hands-on experience in backend development and designing robust, secure APIs for enterprise-level applications.
- Skilled in DevOps practices** including CI/CD pipeline automation, containerization with Docker, and cloud services like AWS Lambda and EC2, ensuring efficient and reliable deployment workflows.
- Experienced in designing AWS multi-region architectures**, leveraging services like VPCs, Route 53, and Global Accelerator for low-latency routing and high availability across cloud infrastructures.
- Proven ability to build high-availability solutions** using AWS tools like Secrets Manager, RDS, and EC2, ensuring robust and secure cloud-based systems that minimize downtime and maximize performance.
- Hands-on experience in integrating Python applications with React JS frontends**, delivering seamless user experiences and real-time data synchronization for various business processes.
- Strong understanding of cloud security best practices**, including the implementation of JWT-based authentication, role-based access control, and secure database management to protect sensitive data.
- Track record of successfully managing and deploying projects** from development to production, with a focus on improving operational efficiency, reducing manual efforts, and enhancing team collaboration in an agile environment.

### PROFESSIONAL EXPERIENCE

➤ **2022 - Present | Sagsol | Started as a Developer, later progressed to DevOps Engineer (Junior)**

#### KEY RESULT AREAS:

- Architecting and deploying scalable, resilient, and secure cloud infrastructures to support dynamic applications and services.
- Streamlining and automating CI/CD pipelines to enhance deployment efficiency, reduce manual intervention, and accelerate software delivery cycles.
- Partnering with cross-disciplinary teams, including development, QA, and operations, to ensure seamless integration and delivery of applications and services.
- Administering and optimizing cloud environments to maintain high availability, performance, and reliability across production systems.
- Establishing and managing Infrastructure as Code (IaC) practices using advanced automation tools such as Terraform and CloudFormation.
- Diagnosing and mitigating complex system issues, applying root cause analysis, and optimizing system performance for uninterrupted operations.
- Conducting continuous system monitoring and performance tuning to proactively identify bottlenecks and implement system optimizations.
- Enforcing stringent security protocols, ensuring adherence to best practices, and maintaining compliance with regulatory standards across the software lifecycle.
- Facilitating collaborative efforts across technical and non-technical teams to foster automation, drive operational excellence, and cultivate a robust DevOps culture.

### TECHNICAL SKILLS

- Languages:** Python, MySQL, AWS
- Frameworks:** Django
- Tools:** VS Code, Docker, Git, Linux, CI/CD Pipelines, AWS Lambda, AWS EC2

### INTERNSHIP DETAILS

#### Internshala:

- Completed an 8-week online Web Development training, achieving a score of 67%.

PROJECT DETAILS

Project 1: AnyAudit AWS Multi-Region Architecture

Organization: Sagsol  
Role: DevOps Engineer (Junior)  
Project Overview:

- Designed and implemented a resilient and scalable AWS multi-region architecture spanning Hyderabad and Mumbai.
- Built secure VPCs with private and public subnets, integrating AWS Global Accelerator for low-latency routing.
- Configured Route 53 with health checks for DNS resolution and reliability.

Key Contributions:

- Deployed Auto Scaling Groups to handle dynamic traffic effectively.
- Interlinked RDS instances for database redundancy and secure database connections using AWS Secrets Manager.
- Ensured high availability and minimal downtime during regional outages, demonstrating expertise in AWS infrastructure design.
- Enhanced CI/CD pipelines for efficient deployments and minimal downtime.

Project 2: Inventory Management API

Organization: Sagsol  
Role: SDE-1 (Python, Django)  
Project Overview:

- Developed a robust inventory management API using Django and implemented secure API authentication via JWT tokens. The API was designed for large enterprises managing multiple warehouses and store locations, enabling seamless project and product movement tracking.
- Integrated with a React JS frontend for seamless user interaction.

Key Contributions:

- Designed and developed endpoints with efficient SQL queries to ensure secure and reliable data retrieval and manipulation across the system.
- Created a unique identification code system for products, enabling efficient tracking and handling across different warehouses and store locations, greatly improving inventory traceability and operational efficiency.
- Enhanced data security by implementing JWT-based authentication and role-based access control to prevent unauthorized access.
- Optimized the integration process between warehouse operations and project movement workflows, ensuring real-time synchronization across all systems.

Project 3: Employee Self-Service Platform

Organization: Sagsol  
Role: SDE-1 (Python, Django)  
Project Overview:

- Developed a centralized employee self-service platform using Python Django, enabling employees to autonomously manage their data and reducing the administrative burden on HR.

Key Contributions:

- Integrated the platform with React JS to deliver an intuitive user interface and seamless user interactions.
- Deployed the application on AWS EC2 with a complete setup of RDS and Apache, ensuring scalability and reliability.
- Enabled online employee onboarding and management, simplifying the process for HR and new hires.
- Facilitated access to employees' data and company documents, including policies, workplace safety regulations, and a knowledge base.
- Implemented features for managing and tracking employees' timesheets, schedules, assignments, and HR-related tasks like benefits, tax, and payroll.
- Streamlined navigation of company applications and systems to enhance employee productivity.
- Supported employee training, knowledge transfer, and surveys to promote skill development and feedback collection.

Project 4: AnyAudit Auditing Platform

Organization: Sagsol  
Role: SDE-1 (CodeIgniter, MySQL)  
Project Overview:

- Developed a comprehensive auditing platform using PHP and the CodeIgniter framework to streamline Chartered Accountants' (CAs) workflows, automating key functions similar to accounting software like Tally, significantly enhancing operational efficiency.

Key Contributions:

- Deployed the platform using a CodeCommit pipeline within a secure VPC, ensuring seamless CI/CD workflows.
- Configured server setups with load balancers to optimize availability and performance.
- Contributed to core functionality development using CodeIgniter and JavaScript for user-facing and backend features.
- Designed and implemented the Internal Control Testing module, enabling detailed auditing and compliance tracking.
- Enhanced platform security with robust data validation and custom financial algorithms for reliable outputs.
- Delivered secure and user-friendly interfaces, reducing manual efforts through optimized workflows and increasing platform efficiency.