# DEEPAK RAGHUWANSHI

### Cloud DevOps Architect: Innovating Infrastructure Automation and Enhancing System Performance

Phone: +91- 9425045390 | Email: raghuwanshideepak79.dr@gmail.com | LinkedIn

# **SUMMARY**

Experienced and results-driven DevOps Engineer with ~6 years rich of experience and a proven track record of optimizing deployment processes, enhancing system performance, and driving automation initiatives to streamline operations. Recognized for outstanding contributions in leading migration projects from manual to automated setups, resulting in substantial time and cost savings for organizations. Proficient in cloud platforms such as AWS, Azure, and GCP, with expertise in Azure DevOps Services, automation tools like PowerShell and Python, and continuous integration tools like Jenkins. Skilled in infrastructure as code (IAC) using Terraform and ARM, containerization with Docker, and orchestration with Kubernetes. Adept at troubleshooting complex issues, collaborating with crossfunctional teams, and implementing best practices for security, reliability, and scalability. Committed to delivering high-quality solutions that meet business objectives and drive organizational success.

# **SKILLS PORTFOLIO**

- DevOps and Automation
- Optimization and Performance Enhancement
- Cost Savings
- Process Improvements
- Code Quality and Integrity
- Cost-saving Initiatives
- Infrastructure Management
- Security Enhancement
- Troubleshooting
- Cross-functional Coordination
- Azure DevOps
- Pipeline Management

- Microservices Best Practices
- Solution Design & Development
- Requirement Gathering & Analysis
- Server Administration
- Data Processing and Reporting
- Error Management
- Quality Assurance
- Stakeholder Management
- Interpersonal communication
- Problem-solving
- Team Management

#### TECHNICAL SKILLS

Cloud Platforms - AWS, Azure, GCP

Azure DevOps Services - Boards, Repos, Pipelines, Test Plans, Artifacts

Automation Tools – PowerShell, Python

Continuous Integration (CI) – Jenkins

Version Control Tools - GIT, GitLab

IAAC – Terraform, ARM

Containerization- Docker, Kubernetes

Orchestration- Kubernetes

Container Registry- Docker Hub

Container Management- Image creation, versioning, optimization

CI/CD Integration Docker and Kubernetes integration into CI/CD pipelines

Build Tools - Maven

Servers – Windows, Linux

### PROCESS AUTOMATION

**File System Management:** Addressing Disk Usage Issues | Automating Disk Extension | Removal of Temporary and Unused VM Binaries **Compute Management:** Automated Provisioning and De-Provisioning of VMs | Workspace Creation and Management | Handling Host Down and Ping Failure Events with Resolution | Conducting Complete Health Checks

Reporting Automation: Generating Automated Reports in Excel and HTML Formats

Active Directory Management: Managing Inactive Users | Ensuring Compliance and Access Management

**Alert Monitoring:** Monitoring Metrics | Sending Alerts Using SMTP Server

Cost Savings Measures: Removing Unused Azure Container Registry (ACR) | Managing Container Instances and Blob Storages for Cost Optimization

### **WORK EXPERIENCE**

# Nov 2022 - Present | Roche Information Solutions | DevOps Engineer | Azure Cloud DevOps

# **Key Achievements & Responsibilities:**

# **Optimization and Performance Enhancement:**

Recognized by stakeholders for outstanding contributions in optimizing deployment processes and enhancing system
performance.

#### **Automation and Cost Savings:**

 Acknowledged for successfully leading the migration from a vendor-driven manual configuration process to an automated setup, resulting in substantial time and cost savings

### **Automation and Process Improvement:**

- Led migration from manual vendor-driven configuration to automated setup using multistage pipelines, enhancing deployment efficiency.
- Transformed deployment pipeline from 11 environments with 64 pipelines each to a consolidated setup of 64 Multistage YAML pipelines, simplifying the release process.
- Introduced one-click deployments, reducing deployment time from a month to a single day and improving ease of use.

### **Code Quality and Integrity:**

- Implemented code quality measures such as pull request policies, auto-reviews, build validations, and automated deployments to ensure code integrity and minimize errors.
- Integrated Terraform state management for centralized control over existing infrastructure, enabling seamless management.

#### **Cost-saving Initiatives and Infrastructure Management:**

- Developed and deployed pipelines and scripts for cost-saving initiatives, actively monitoring infrastructure and Kubernetes pods to optimize resource utilization.
- Managed Kubernetes services on Azure and AWS for microservice architecture, overseeing automated deployments and ensuring infrastructure reliability.

#### **Security Enhancement:**

- Enhanced security measures and centralized configuration for Kubernetes pods, ensuring a robust and secure environment.
- Implemented robust security measures by integrating SAST, SCA, and JFrog Xray into the build pipeline.
- Conducted periodic security audits and assessments to identify vulnerabilities and implement corrective measures to fortify the overall security infrastructure.

# Nov 2021-Nov 2022 | Tieto | Configuration Engineer | Azure Cloud DevOps

### **Key Achievements & Responsibilities:**

### **Automation and Infrastructure Management:**

- Designed and implemented automation for manual processes on Azure and On-premises infrastructure using PowerShell, Bash, Azure DevOps, and Python.
- Created and managed infrastructure and configuration with Terraform, Docker, PowerShell, and Azure DevOps Pipelines.
- Orchestrated secure storage and rotation of secrets within Azure Key Vault, ensuring compliance with security policies and minimizing unauthorized access risks.
- Developed and executed a comprehensive strategy for handling certificate lifecycles, ensuring timely renewal and minimizing disruptions to services.

### **Troubleshooting and Collaboration:**

- Troubleshot failures related to infrastructure, Azure DevOps Pipelines, agents, Terraform state, Docker, App Service, Function App, AD & IAM, compute resources, and hosted solutions.
- Partnered with clients and DEV team to understand architecture for provisioning resources with DevOps practices and Infrastructure as Code (IAC) tools.
- Collaborated with cross-functional teams to establish best practices for security management and compliance.

### **Azure DevOps and Pipeline Management:**

- Created and managed Azure DevOps projects, Git repositories, branch policies & restrictions, and Terraform modules.
- Set up and managed core Azure pipelines & YAML definitions, configuring agents for self-hosted CI/CD VMs, Docker, KV, Networking, etc.
- Documented and deployed solutions to higher environments, ensuring complete handover & ownership for maintaining solutions with rollback strategies in place.
- Assisted build teams in implementing DevOps practices, conducted PR reviews & approval, code quality analysis, resolved merge
  conflicts, and restructured history.

### **Microservices Best Practices:**

- Automated routine tasks using scripting languages such as PowerShell, addressing challenges specific to microservices architectures.
- Collaborated with development and operations teams to define and implement best practices for microservices architecture, deployment, and monitoring.
- Conducted training sessions for team members on microservices best practices and technologies.

# Jul 2018-Nov 2021 | Wipro | Infrastructure Process Automation | Cloud DevOps

### **Key Achievements & Responsibilities:**

### Recognition

• Recognized for the Best Performance in automation

#### Solution Design & Development | Requirement Gathering & Analysis

- Collected and understood requirements by syncing with clients.
- Analyzed Standard Operating Procedures shared by clients to identify key needs and objectives.
- Designed logic & workflow for solutions and initiated development.
- Presented and explained design documents to clients for approval.

### **Server Administration and Infrastructure Management:**

- Developed solutions for server administrative activities including monitoring performance, health checks, vulnerability fixes, certificate management, Azure-AD & Active Directory, O365, Exchange, patching, task scheduling, and background job processing.
- Implemented solutions for creating & managing workspaces, virtual machines on AWS, Azure & VMWare as per business requirements.
- Utilized Terraform for provisioning development and test environments on Azure and AWS.
- Configured environments seamlessly using PowerShell, ensuring consistency and reproducibility.

### **Data Processing and Reporting:**

• Developed solutions for reporting, processing & consolidating data from various sources, Service-Now or data repositories, into master reports with custom dashboards.

# **Error Handling and Quality Assurance:**

- Demonstrated expertise in exception & error handling, maintaining readable but detailed error logs for quick debugging & troubleshooting.
- Applied knowledge of quality analysis tools such as SonarQube and JFrog to assess and enhance code quality.

#### **DevOps and Automation:**

- Managed source code with GitLab, created pipelines on Azure DevOps & Jenkins.
- Performed automation testing integrations with Selenium WebDriver.
- Had hands-on experience in containerization environments with Docker and orchestrator with Kubernetes.
- Implemented best practices to ensure code maintainability, security, and reliability.

### **EDUCATION**

- Bachelors Computer Applications | Amity University | Gwalior | 2018
- Minor degree in Animation | Amity University | Gwalior | 2018

# **CERTIFICATIONS**

- AWS Certified | Cloud Practitioner | 2020
- Microsoft Certified | Azure Fundamentals | 2021
- HashiCorp Certified | Terraform Associate | 2021