  

**Sudhakar Mane**

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**Professional Summary:**

* Experienced DevOps Engineer with 13+ years of expertise in designing and automating CI/CD pipelines.
* Proficient in managing cloud infrastructure and implementing container orchestration solutions using Azure, Kubernetes, and Terraform.
* Proven track record in optimizing deployment workflows, ensuring scalable infrastructure, and enhancing system security
* Adept at implementing Infrastructure as Code (IaC) for automated provisioning and management of cloud resources.
* Skilled in automating deployments using Ansible and managing Azure DevOps pipelines for seamless software delivery.
* Extensive experience with Jenkins, designing and implementing efficient CI/CD pipelines to automate build, test, and deployment processes.
* Proficient in CI/CD tools like Jenkins, Argo CD, Azure DevOps, Helm Charts, and IaC tools such as Terraform and ARM Templates.
* Strong expertise in Azure networking, including setting up and securing virtual networks, configuring subnets, Network Security Groups (NSGs), and managing private and public endpoints.
* Skilled in designing and implementing high-availability load balancing solutions using Azure Application Gateway, Azure Load Balancer, and NGINX for optimal traffic distribution and system reliability.
* Hands-on experience with network security in Azure, including configuring Site-to-Site (S2S) VPN connections and integrating hybrid cloud environments with on-premises infrastructure.
* Experienced in integrating cloud-native services like Azure Key Vault, Prometheus, and Grafana for continuous monitoring, security, and performance optimization.
* Strong ability to drive efficiency and quality improvements while ensuring high availability and reliability of enterprise applications.
* Proficient in Shell scripting and Python to automate routine tasks, streamline system administration, and optimize workflows.

**Certifications:**

* Microsoft Certified: AZ-900 Azure Fundamentals – 2020
* Microsoft Certified: AZ-104 Azur Administrator – 2021
* Microsoft Certified: AZ-400 Azure DevOps Engineer Expert – 2021
* AWS Certified Solutions Architect- Associate – 2024

**Skills:**

* Cloud Platforms: Microsoft Azure, AWS
* CI/CD & Build Tools: Azure DevOps (YAML), Jenkins (Groovy), Gradle, Maven
* Infrastructure as Code (IaC): Terraform, Azure ARM Templates
* Containerization & Orchestration: Docker, Kubernetes, Azure AKS
* Configuration Management: Ansible
* Monitoring & Logging: Azure Monitor, ELK Stack, Prometheus, Grafana
* Source Control: Git, GitHub, GitLab, Bitbucket, Azure Repos
* Load Balancing & Networking: NGINX, Apache, Azure Application Gateway, Azure Load Balancer, NGINX Ingress Controller
* Databases: Oracle, MySQL, MongoDB, Azure MySQL
* Scripting: Shell Scripting, Python, PowerShell Scripting, NodeJs, ExpressJs
* ITSM & Collaboration: ServiceNow, JIRA, SharePoint, Azure Boards
* OS Platforms: Linux, Windows
* Release & Deployment Management: Helm, Harness, BMC RLM

**Work Experience:**

**Client: Citigroup**

**Lead DevOps/Release Engineer | Irving, TX 03/2021 to Current**

**Project Description:** The project focuses on IT performance optimization, risk Management, and strategic IT planning. It involves stress-testing portfolio data against various risk factors and generating detailed reports. A dashboard tool supports stress test calculations, factor management, and What-if analysis to provide insights into portfolio performance and risk led a team of four people to finish the project in time.

**Roles & Responsibilities:**

* Implemented a structured Git branching strategy in Azure DevOps with feature branches, pull requests, and strict branch policies to enhance code quality, streamline workflows, and improve pipeline security.
* Led the migration of monolithic applications to microservices hosted on AWS/Azure, improving scalability and reducing infrastructure costs.
* Led a cross-functional DevOps team of four engineers, delivering CI/CD pipelines and infrastructure automation that reduced deployment time.
* Designed and implemented private Azure Kubernetes Clusters with custom VNet, subnet, and NSG configurations.
* Created JavaScript-based Lambda functions and serverless workflows for real-time alerting, event-driven automation, and infrastructure monitoring.
* Implemented RESTful APIs with Express.js for internal DevOps tooling and integration with cloud services like AWS, Azure.
* Integrated Terraform into CI/CD pipelines with Jenkins and GitLab CI, facilitating automated infrastructure changes and minimizing manual intervention.
* Managed multi-cloud environments by implementing Terraform workspaces, ensuring isolated and secure deployments for development, staging, and production.
* Integrated Packer into Jenkins CI pipelines to auto-generate new AWS AMIs on each code commit; Jenkins triggers a Packer build to image the latest application version and redeploy updated instances, accelerating release cycles
* Implemented Azure Application Gateway with WAF, DDoS protection, and TLS termination for external traffic, while using an internal NGINX Ingress Controller backed by an Internal Load Balancer for secure in-cluster service communication in AKS.
* Integrated DevOps practices into Martech stack deployments, enabling version control, testing, and automated rollbacks for email templates, landing pages, and personalization scripts.
* Containerized Martech components using Docker and managed orchestration using Kubernetes/OpenShift.
* Worked closely with marketing and data teams to streamline releases, track KPIs, and ensure high availability of customer-facing Martech applications.
* Designed and implemented multi-stage CI/CD pipelines in Azure DevOps (YAML-based) and Jenkins (Groovy-based) for Dev, UAT, and Prod environments.
* Integrated Helm for AKS deployments, automating versioning with Git tags and semantic versioning.
* Built and integrated **unit testing frameworks** using **cpp-unit, Catch2, and GTest**, ensuring robust test coverage and code reliability.
* Supported event-driven marketing workflows by integrating Martech platforms with Kafka, Segment, and Snowflake using automated data pipelines.
* Developed reusable Terraform modules, managing multi-environment deployments (Dev, UAT, Prod) and automated state locking with Azure Storage.
* Automated package deployment using shell scripts during VM provisioning and developed Python scripts to interact with Azure APIs for repository insights.
* Designed AKS cluster backup and disaster recovery solutions using Velero, ensuring business continuity.
* Automated deployment flows using Ansible playbooks and Helm charts.
* Optimized **build systems (CMake, Bazel)** for C++ microservices to enhance compilation speed and dependency management.
* Configured self-hosted Azure DevOps agents with custom capabilities for optimized resource utilization.
* Managed JFrog Arti-factory for storing versioned Maven artifacts, Docker images and Helm charts, ensuring artifact integrity across environments.
* Implemented Secure Secret Management in Kubernetes using Azure Key Vault and Secret Store CSI Driver.
* Automated the creation of golden machine images of AMI, Azure VM Image by using HashiCorp Packer for consistent infrastructure deployments.
* Worked with Azure identities- Managed Identities and Service Principal.
* Managed Azure Active Directory (AAD) for user authentication, Single Sign-On (SSO), and Role-Based Access Control (RBAC).
* Designed and implemented CI/CD pipelines using Harness to automate build, test, and deployment workflows across microservices and containerized applications.
* Integrated HashiCorp Packer with AWS EC2, Azure Virtual Machines, and GCP Compute Engine for automated cloud image builds and updates.
* Automated cross-platform deployments using Ansible playbooks, optimizing workflows for Linux and Windows servers.
* Automated SonarQube integration in pipelines for static code analysis (Java & Node.js).
* Designed and optimized **developer experience (DevEx) frameworks**, improving productivity and workflow efficiency for engineering teams.
* Implemented Azure Monitor with Log Analytics, Application Insights, and Container Insights for full-stack observability.
* Developed Python scripts to automate routine DevOps tasks such as log parsing, service monitoring, and environment health checks.
* Automated infrastructure validation and compliance checks using Python with libraries like boto3, requests, and subprocess.
* Created lightweight Node.js scripts for automation tasks, custom monitoring agents, and integration with third-party DevOps tools.
* Configured KQL queries, alerts, and dashboards for proactive monitoring of VMs, AKS, and applications.
* Integrated Prometheus & Grafana for AKS monitoring and Security Center & Defender for threat detection.
* Configured Harness pipelines with approval gates, rollback strategies, and canary/blue-green deployments for zero-downtime releases.
* Integrated Harness with source control (GitHub/GitLab), artifact repositories (JFrog/Nexus), and Kubernetes clusters for end-to-end delivery automation.
* Developed and maintained **unit tests for C++ frameworks**, ensuring robust and reliable code quality across CI/CD pipelines.
* Integrated automated test suites into **DevOps workflows** using tools like Jenkins, GitLab CI other CI tools.
* Proficient in implementing Azure policy and Governance to ensure compliance, resource standardization, and effective cloud management.
* Creating Azure DB for MySQL servers using Azure PAAS service, Enabling SQL tuning parameters through Azure, checking query Performance.
* Co-coordinating with support teams to remediate vulnerabilities
* Raising Change Requests on Service Now per release for UAT and PROD deployment and Maintenance activities.

**Environment:** Azure, Terraform, Docker, Azure Kubernetes Service (AKS), Jenkins, Azure DevOps, Git, Bitbucket, JFrog, Prometheus, Grafana, Ansible, Helm, Azure DB for MySQL, Service Now, SONAR, NGINX, Azure Application Gateway, Azure Internal Load Balancer

**Client: ZiplyFiber**

**Sr. Azure DevOps | Cloud Infra Engineer | Plano, TX 09/2019 to 03/2021**

**Project Description:** ZiplyFiber provides Internet, TV, and Phone services in the Northwest region. The NWF system is divided into two main application tiers: Frontend and Backend. The Frontend handles user requests and product orders via the website, allowing customers to subscribe/unsubscribe to promotional offers and receive notifications. The Backend manages customer data, address verification, service availability, and product information using Node.js and MongoDB, along with support ticket creation and billing account details.

**Roles & Responsibilities:**

* Designed and delivered mission-critical infrastructure to maintain consistent availability and performance in Azure cloud environment.
* Defined modular and reusable Packer templates with HCL/JSON to support OS patching, security hardening, and pre-installed software stacks.
* Designed Azure networks supporting internal and external users with VPNs, firewalls, and two-factor authentication.
* Conducted regular code reviews and implemented best practices for Terraform configurations, improving code quality and maintainability.
* Developed internal dashboards using JavaScript and frameworks like React or Express.js to visualize CI/CD pipeline metrics and system health.
* Trained cross-functional teams on Terraform usage and Infrastructure as Code (IaC) principles, fostering a culture of automation and collaboration.
* Monitored and audited infrastructure changes using Terraform state files and version control systems, ensuring traceability and accountability.
* Used Packer in combination with configuration management tools like Ansible, Chef, or Shell scripts to build consistent and compliant base images.
* Automated deployment validation and health checks using Harness verification steps, integrating with tools like Prometheus, Splunk, and Datadog.
* Working knowledge of DNS, network routing/subnetting, Monitoring, SSL Certificates.
* Built and maintained **C++ unit test frameworks** and integrated them with CI/CD pipelines for streamlined testing and deployment.
* Developed **custom CLI tools and automation scripts** using Python and Bash to simplify build, deployment, and monitoring processes.
* Studied network security logs to identify and eliminate outside and internal threats.
* Well versed experience in handling Azure services such as Virtual Machines, VMSS, App service, Azure MYSQL servers, NSGs, Virtual network Gateways, Azure load balancers.
* Experience in Azure AD Administration
* Created backup and restore solutions for Azure resources.
* Successfully migrated Azure Application Gateway to Cloudflare’s Argo Tunnel for a cost-effective and more secure approach, aligning with client requirements.
* Implemented Azure monitoring solutions and alerts - Application Insights, service maps and log analytics etc.
* Designed and optimized **frameworks for logging and monitoring** using tools like **DataDog and Splunk**, providing end-to-end visibility into application performance.
* Automated application builds and deployment, driving efficiency of code development process using Jenkins.
* Enhanced **CMake and Bazel-based build frameworks** for improved compilation speed, dependency resolution, and codebase modularity.
* Planned, tested, and supported high-availability infrastructures and DR solutions.
* Hands-on experience developing Infrastructure as Code (IaC) Terraform, Azure ARM templates.
* Azure resource migration activity from Pay-As-You-Go subscription to CSP subscription.

**Environment:** Azure, Terraform, Azure ARM templates, Jenkins, Azure Virtual Machines, VMSS, App Service, Azure MySQL, NSGs, Virtual Network Gateways, Azure Load Balancers, Azure AD, Application Insights, Log Analytics, Service Maps, Cloudflare Argo Tunnel, VPN, Firewalls, SSL Certificates, DNS, Network Routing/Subnetting, NodeJs.

**Client: AT&T**

**Java Developer | White Plains, NY  06/2011 to 09/2019**

**Project description:** This project handles all forms of notifications to AT&T consumers, including billing, ordering, and login updates. Key components include systems responsible for generating and delivering notifications via email, mail, SMS, and automated orders. The team ensures that the transaction flow meets defined SLAs and manages any deviations or changes to notifications. My role involved setting up and managing environments, deploying code across multiple stages, and managing over 100 servers, along with handling environment issues and security certificates.

**Roles & Responsibilities:**

* Implemented CI/CD pipeline for automated build and deployments using Jenkins, groovy scripting.
* Implemented CI/CD pipelines with Jenkins/GitLab CI to automate build, testing, and deployment processes for C++ microservices.
* Worked on middleware application servers - WebLogic and JBoss for JAVA applications.
* Configuring Apache Webservers for load balancing Hands-on experience on Ansible as configuration management tool, to automate repetitive tasks, quickly deploy critical applications.
* Collaborated with development teams to enhance **microservice performance, security, and scalability**.
* Designed and developed interactive static HTML screens as screen level prototype, JavaScript for client side validation and used Cascading Style Sheet (CSS).
* Created browser-based UI using HTML, JavaScript, AJAX components.
* Developed JSP custom tags and used JSTL for reusability.
* Used AJAX to support dynamic page element rendering to enhance user experience.
* Involved in component development and used design patterns such as Singleton, Factory and Data Access Object (DAO) in implementation of application.
* Experience with Kubernetes to manage containerized applications, creating configMaps, Deployments, Secrets, Services and Deploying application containers as pods.
* Experience in ELK stack for Pod and application log monitoring. Creating Kibana dashboard.
* Production Alert monitoring and fixing issues.
* Ordering/Installing/renewing SSL/TLS certificate for application.
* Collecting thread/heap dumps for performance analysis using various tools.
* Participating in project planning calls for hardware migration (Unix to Linux and implementing a new design for existing applications like migrating from standalone Java process to WebLogic for better management/performance of resources being used by app) and providing suggestions in project planning work.
* Configured JMS modules- JMS Q’s, JMS connection factories, foreign servers.
* Introscope (tool for performance measurement) installation/configuration/profile creation for application.
* Collecting different reports - thread dump, histogram heap dump for analysis.
* Written WLST script to get running status of WLS instances hosted on multiple machines.

**Environment:** Jenkins, Groovy, WebLogic, JBoss, Apache Webservers, Ansible, Kubernetes, ELK Stack (Elasticsearch, Logstash, Kibana), SSL/TLS Certificates, JMS, Introscope, WLST, Linux, Java, Middleware Applications, Thread Dumps, Heap Dumps.

**Education and Training:**

* Bachelor of Engineering (B.E.) – Electronics & Communication Engineering
Shivaji University, Maharashtra | Graduation Year: 2011