MAHENDRA NAGALLA

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**PROFESSIONAL SUMMARY**

DevOps Engineer with around 5 years of IT experience, specializing in Azure and AWS cloud technologies, CI/CD, infrastructure automation, and configuration management. Expert in DevOps practices, end-to-end automation, version control, and cloud migrations. Skilled in Linux administration and Agile, Scrum, and Waterfall methodologies, ensuring best practices in software configuration management.

**TECHNICAL SKILLS**

* **Cloud Environments:** Azure, Amazon Web Services (AWS), GCP
* **AWS Services:** EC2, EKS, ECR, Route53, VPC, IAM, CloudFormation, CodeBuild, CodePipeline, EBS, S3, ELB, Auto Scaling, CloudTrial, SQS, SNS, SWF, CloudWatch
* **Azure Services:** VMs, VNet, App Services, Key vault, function app, Blob storage, Azure Active Directory (Azure AD), Service Bus, Azure Container Registry (ACR), Azure Kubernetes Services (AKS), Azure SQL, Azure Cosmos DB
* **Version Control Tools:** GIT, GITHUB, GITLAB, Bitbucket, Azure Repos
* **CI/CD Tools:** Jenkins, Azure DevOps, GitHub Actions
* **Build:** Maven, Gradle, MSBuild
* **Automation Tools:** Ansible, Terraform
* **Monitoring Tools:** Splunk, ELK, CloudWatch, Azure Monitor, Prometheus, New Relic, Grafana
* **Container Tools:** Docker, Docker Swarm, Kubernetes, OpenShift, AWS ECS
* **Bug Tracking Tools:** JIRA, HP Quality Center, ServiceNow
* **Database:** Cosmos DB, RDS, MS SQL, Dynamo DB, MongoDB
* **Scripting Languages:** Shell Scripting, Power Shell, Python
* **Application/Web Servers:** Web sphere, Apache Tomcat, Nginx, IIS
* **Operating Systems:** UNIX, Linux, Windows, Solaris, CentOS, UBUNTU, RHEL **PROFESSIONAL EXPERIENCE**

**Cisco Sep 2023 - Present**

**AWS Cloud/DevOps Engineer San Jose, CA**

* Worked on AWS Cloud platform, including services like EC2, VPC, S3, and others, to design, deploy, and manage scalable, secure, and highly available cloud infrastructure solutions, enhancing system reliability and performance.
* Designed AWS CloudFormation templates to create custom-sized VPC, subnets, and NAT to ensure successful deployment of Web applications and database templates in AWS Cloud.
* Led the strategic planning and execution of migrating on-premises applications and infrastructure to AWS using services like AWS Migration Hub, AWS Server Migration Service (SMS), AWS Database Migration Service (DMS), and AWS Snowball, ensuring a seamless transition with minimal downtime and data integrity.
* Configured and managed OpenShift clusters on-premises to support the development and deployment of containerized applications, ensuring high availability, scalability, and efficient resource utilization across the clusters.
* Developed CI/CD pipelines using Jenkins to build, test, and deploy microservices containers on Kubernetes clusters across DEV, UAT, and PROD environments, also developed shared pipeline libraries to ensure code reuse and consistency across multiple pipelines.
* Configured and managed virtual networks, VPNs, and firewalls to ensure secure and efficient network communication between on-premises systems and AWS cloud environments.
* Implemented replication and clustering solutions for PostgreSQL to enhance data redundancy and scalability, and designed and executed backup and recovery strategies to prevent data loss and ensure data integrity.
* Managed deployments of microservices on containers using containerization tools like docker and Docker compose and used Kubernetes for orchestration built into Jenkins for continuous deployments into various environments.
* Utilized Ansible and Ansible Tower as configuration management tools, to automate repetitive tasks, deploy applications, manage changes, and automate software updates, ensuring consistent functionality.
* Enhanced team collaboration and code change tracking by utilizing GitHub version control, assessed deployment options for GitHub Enterprise, and implemented user management strategies, including LDAP integration, to streamline access and permissions control, improving security and efficiency
* Utilized DataDog to set up comprehensive monitoring and alerting systems for various applications and infrastructure components, ensuring proactive issue resolution and minimizing downtime.

**Comerica Bank Aug 2022 - Sep 2023**

**Azure DevOps Engineer Dallas, TX**

* Configured Azure Virtual Machines, Azure webApps, App Services, Azure Storage Accounts, Azure AD, Azure DevOps, and other services, enhancing system performance and reliability.
* Designed and implemented CI/CD pipelines using Azure DevOps, automating the build, test, and deployment processes to streamline application delivery and improve deployment frequency.
* Implemented comprehensive monitoring and logging with Azure Monitor, Application Insights, and Log Analytics, configuring alerts and dashboards to proactively identify and resolve performance issues, to ensure high availability and reliability.
* Managed source code repositories using Azure Repos, implementing branching strategies, pull request workflows, and code reviews to maintain code quality and collaboration.
* Uploaded files and objects to Azure Blob Storage containers, implementing lifecycle management policies to automate data tiering and retention, which improved data management efficiency.
* Developed and implemented comprehensive disaster recovery plans, including automated failover and backup solutions, to ensure business continuity and minimize downtime in case of system failures.
* Automated infrastructure provisioning and management using Azure Resource Manager (ARM) templates and Terraform, ensuring consistent and repeatable deployments across multiple environments.
* Implemented security and compliance best practices in Azure DevOps by configuring service connections, managing secrets with Azure Key Vault, and enforcing security policies, which enhanced system security and compliance.
* Implemented and managed Azure Kubernetes Service (AKS) clusters, automating the deployment, scaling, and operations of con- tainerized applications while ensuring high availability and robust security.
* Managed Azure Container Registry (ACR) for storing and scaling Docker container images, ensuring high availability, and efficiently handled image versioning and tagging to track updates and facilitate rollbacks.
* Facilitated collaboration and project management with Azure Boards by creating work items, user stories, and tasks to track progress and maintain transparency.
* Worked closely with development, QA, and operations teams to streamline the development lifecycle, foster a DevOps culture, and ensure seamless integration and delivery of software projects.

**Capgemini Oct 2018 - Jul 2021**

**DevOps Engineer Bangalore, IN**

* Designed, deployed, and managed scalable and resilient infrastructure on Azure, including virtual machines, virtual networks, and load balancers, to support dynamic workloads and applications.
* Configured a VNet in Azure to establish network isolation and control traffic flow between Azure resources. Implemented subnetting, network security groups (NSGs), and virtual network gateways within the VNet, which enhanced security and optimized resource communication.
* Configured and managed Azure Storage Accounts to support various storage needs, including blob, file, query, and table storage, ensuring reliable data access and scalability, which improved data management efficiency.e
* Configured and managed Jenkins build and automation jobs, deploying EAR, WAR, and JAR files to application servers such as Apache Tomcat and WebSphere, which streamlined deployment processes and reduced downtime.
* Managed GitLab for comprehensive version control, overseeing repositories, enforcing proper branching, merging, and code review workflows, while ensuring secure access controls and permissions which maintained code integrity across distributed teams.
* Set up and deployed Kubernetes (k8s) clusters for running microservices with Docker containerization, and automated cluster management using Ansible playbooks for production environments.
* Implemented a Continuous Delivery pipeline with Docker, Jenkins, and GitLab, automatically building new Docker containers from new GitLab branches in Jenkins, enhancing development speed and integration.
* Involved in configuring several workflows, plugins, and customizations for the JIRA bug/issue tracker in addition to setting up the system as a defect-tracking tool.
* Utilized Terraform to build and version infrastructure, leveraging its key features such as Infrastructure as Code, Execution Plans, Resource Graphs, and Change Automation to create staging and production environments, ensuring consistent and efficient infrastructure management.
* Designed and implemented API gateways and management solutions to handle API traffic, ensuring security, scalability, and monitoring of API endpoints.
* Installed and maintained various Splunk Add-on applications on Splunk infrastructure and universal forwarders, optimizing data collection and analysis and Configure alerts and dashboards to monitor the health and performance of Azure services and applications.
* Managed Datadog's alerting and notification features to set up custom thresholds, create alert policies, and receive timely notifications for proactive incident response.
* Administered MongoDB databases, including setup, maintenance, and performance tuning to support high-throughput applications, and designed and implemented data models for efficient data storage and retrieval.
* Collaborated with QA teams to integrate automated testing into the release process, ensuring comprehensive testing prior to deployment, and worked closely with cross-functional teams to align with data requirements and deliver solutions meeting business needs.

**CERTIFICATIONS**

* [**Google IT Support**](https://www.coursera.org/account/accomplishments/professional-cert/6N3DQYUJ9WAT)
* [**Google IT Automation with Python**](https://www.coursera.org/account/accomplishments/professional-cert/RHLBXKTNUD79)
* [**Microsoft Certified: Azure Fundamentals**](https://learn.microsoft.com/api/credentials/share/en-us/MahendraN-6743/EC45F646301902C6?sharingId=51739682A67ABB0D)
* [**Microsoft Certified: Azure Administrator Associate**](https://learn.microsoft.com/api/credentials/share/en-us/MahendraN-6743/BE5429B32BC9069?sharingId=51739682A67ABB0D)

**EDUCATION**

**Governors State University** **Dec 2022**

Master of Science, Computer Science