PRATHIK MARNENI

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PROFESSIONAL SUMMARY

Cloud DevOps Engineer with 5+ years of IT Experience of **DevOps Engineering, Build/Release Engineer**. Implemented effective IT strategies and hands-on experience supporting, automating, and optimizing critical deployments in **Microsoft Azure, Amazon Web Services**, **leveraging configuration management, CI/CD.** Experience in configuring **Azure web apps, Azure App services, Azure Application insights, Azure Application gateway, Azure DNS, Azure Traffic manager, Aws IAM, Auto Scaling, Elastic Load Balancing, Amazon S3, Route 53.**

- Created and managed Docker deployment pipeline for custom application images in the cloud using **Jenkins**.
- Experience pulling Docker images from Docker hub and uploading it to **AWS ECR**, Automated **S3** interactions for storing artifacts and configuration files using **AWS CLI** and **Boto3**, enabling seamless integration with **CI/CD** workflows.
- Implemented **AWS Identity and Access Management (IAM)** Groups and Users to enhance login authentication. Defined customized policies for groups, assigning distinct permissions based on specific requirements, and providing **Amazon Resource Names (ARNs)**.
- Created **Python Scripts** to Automate **Azure** services, include web servers, Cloud front Distribution, database, virtual machines and database **security groups**, data lakes and application configuration, this Script creates stacks, single servers or joins web servers to stacks.
- Used **Jenkins** and implemented **CI/CD pipeline** using plugins like conditional build step, deploy to Git.
- Written **Ansible Playbooks**, and roles, automating infrastructure in **AWS, Webservers, SQL Server** etc. Mitigated **AWS** costs by writing the Ansible playbook for auto start/stop of **AWS resources** at a time of the day by triggering it from **Jenkins**.
- Experience in Microsoft **Azure** services such as (PaaS & IaaS & SaaS), Storage, Web Apps, Active Directory, Logic Apps, Data Factory, Service Bus, Cloud services, ExpressRoute, Load Balancing.
- Services and Config Maps created for reproducible builds of the **Kubernetes** applications, managed **Kubernetes manifest** files and Helm packages and implemented Kubernetes to deploy scale, load balance, scale and manage **Docker containers** with multiple namespace versions.
- Implemented secrets and credentials management using **AWS Secrets Manager** and **Azure Key Vault**, ensuring secure access across environments.
- Designed and documented **RESTful APIs** using **OpenAPI** specifications, improving communication and collaboration between development teams.

EDUCATION

Master's Degree - Computer Science
Auburn University
Bachelor's Degree - Electrical Electronics and Communications Engineering
Gitam University.

SKILLS

- **Cloud** - Amazon Web Services, Microsoft Azure
- **Orchestration Tools** – Docker, Kubernetes
- **Version Control Tools** – GITHUB, GIT
- **Monitoring and Build Tools** - Splunk, ELK, Maven
- **Continuous Integration** – Jenkins, Bamboo
- **Operating Systems** - Red Hat, Ubuntu, Windows, Mac Os.
- **Languages and Database** - .NET, Python, PowerShell, JSON, YAML, MySQL, Mongo DB

WORK EXPERIENCE

Global Payments.   Atlanta, USA
Associate DevOps Engineer   Jan 2022 – present

- Configured AWS application deployments infrastructure services like **VPC, EC2, S3, RDS, Dynamo DB, Mongo DB, IAM, EBS, Route53, SNS, SES, SQS, CloudWatch, CloudTrail, Security Group, Auto Scaling Group ASG, and RDS using CloudFormation templates**.
- Created and managed Docker deployment pipeline for custom application images in the cloud using **Jenkins**.
- Integrated security compliance checks into **CI/CD** pipelines using tools like **AWS Config** and custom scripts, helping meet audit and governance standards.

- Written **Ansible Playbooks**, and roles, automating infrastructure in **AWS, Webservers, SQL Server** etc. Mitigated **AWS** costs by writing the Ansible playbook for auto start/stop of **AWS resources** at a time of the day by triggering it from **Jenkins**.
- Deployed and configured **Elasticsearch, Logstash and Kibana (ELK)** for log analytics, full-text search, application monitoring in integration with **AWS Lambda** and **CloudWatch.**
- Using **Dockerfiles** containerized **ML** models and deployed them on **Kubernete**s clusters with **GPU** support for high-performance inference.
- Deployed, scaled, and load-balanced containerized applications using **Kubernete**s, managing multiple namespace versions across production environments.
- Integrated **Terraform** into current software release process to help provision AWS resources and deployments of **artifacts and services.**
- Established a robust continuous delivery pipeline using **Docker, Jenkins**, and **GitHub**. Automated the creation of **Docker** containers upon the creation of new branches in **GitHub**, enhancing the efficiency and agility of the development workflow.
- Automated **Datadog** Dashboards with the stack through Terraform Scripts. Configured **CloudWatch** and **Datadog** to monitor real-time granular metrics of all the AWS Services and configured individual dashboards for each resource Agents.
- Provisioned and optimized **GPU**-based compute environments for **AI/ML** workloads using **EC2** instances and **EKS**, supporting scalable model training and inference pipelines.
- Supported legacy **CI** workflows using **Serena** Dimensions tooling, providing integration solutions for **Salesforce.com** data platform teams.
- Implementing a Continuous Delivery framework using **Jenkins**, **ANT**, **Maven &amp**; **Nexus** in Linux environment
- Worked on Docker with **Kubernetes** to create pods for applications and implemented Kubernetes to deploy a web application across a **Multi-node Kubernetes cluster**.
- Worked on setting up a two-step **load balancer** setup by configuring Load balancer such as **NGINX** for frontend to Kubernetes Cluster and to configure "back End" for **Kubernetes service** to proxy traffic to individual pods.
- Experience in Configuration management tools such as **Chef**. Wrote **Chef recipes** and **cookbooks** in **Ruby scripting.**

TEKWORKS DIGITAL PVT LTD   Hyderabad, India
DevOps Engineer   July 2019 – July 2021

- Administrating of **IAAS & PAAS** Virtual Machines and Web/Worker roles on **Microsoft Azure Classic**, **Resource Manager** and **Troubleshooting issues** on **Azure VM**s. Supported technologies, such as **Active Directory Federation Services**, **Azure Active Directory**, and **PowerShell**.
- Designed and Configured Azure App - Cloud Services, PaaS, Azure Data Factory, Azure's QL Data Warehouse, **Azure Blob Storage, Web API, VM creation, ARM Templates, PowerShell scripts, IAAS, storage, network and database.**
- Designed and implemented **Terraform** modules for automating the deployment of **Azure Virtual Machines, Storage Accounts, and Networking** components, optimizing resource management.
- Configured **Active Directory Federation Services** (ADFS) authentication flow, Azure **VPN** for Virtual Network. Integrated **Office 365** with Azure Active directory to synchronize with **SAAS** applications. Also, deployed Azure **IaaS** virtual machines and Cloud services (**PaaS** role instances) into secure Virtual Networks and subnets.
- Utilized Azure **Database Migration Service** (DMS) tool to automate database migration from on premise to Azure. And azure **PRIVATE END POINT** network interface to establish secure private Service. Experience in **Azure**
- **Platform** Development, Deployment Concepts, hosted Cloud Services, platform service and close interface with **Windows Azure Multi-factor Authentications** and Continuing architectural changes to move software system offerings to a distributed, service-based architecture.
- Created **Azure SQL** database, performed **monitoring** and **restoring** of Azure SQL database. Performed migration of **On-premises Microsoft SQL** server to **Azure SQL** database.
- Deployed and optimized **Java** web applications to **Azure DevOps** to focus on development by using services such as Repos to commit codes, Test Plans to trigger application and unit test, deployed artifacts to App Service, Azure Application Insight collects health performance and usage data of the process.
- Created terraform reusable modules to automate resources and worked with **Terraform** Templates to automate the **Azure IaaS virtual machines** using **Terraform** modules and deployed virtual machine scale sets in various environments.
- Deployed microservice applications on **Azure Kubernetes** by using Azure Kubernetes service **(AKS)**, **Kubernetes Cluster,** Virtual Network to deploy agent nodes, Ingress API Gateway, **MySQL Databases** and Cosmo DB for stateless storage of external data, and setup reverse proxy **Nginx, HAProxy** or **Traefik** in the cluster.
- Used **Azure Monitoring** to provide a robust alerting and monitoring solution and maximized the supply and performance of your applications.