**SRILAKSHMI DOMA**

**DevOps Engineer**

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**720-927-4613**

**PROFESSIONAL SUMMARY:**

* Over **8 years of experience** as an **AWS & DevOps Software Engineer with a proven track record** of delivering robust solutions in **SDLC** environments. Skilled in **Source Control Management, Continuous Integration, and Continuous delivery.**
* Implement **Jenkins/GitHub/**Amazon Web Services AMI to manage the cloud platform and set up Continuous Integration, Delivery automation, and orchestration of automated server build, management, monitoring, **and deployment** solutions.
* Handled operations and maintenance support for AWS cloud resources which includes launching, maintaining, and troubleshooting **EC2 instances, and S3 buckets**, creating **custom VPC, subnets, Routes, NAT, EC2 occasions, ELB, and Security** bunches utilizingJSON layouts**, Elastic Load Balancers (ELB) and Relational Database Services Postgres SQL (RDS).**
* Proficient in deploying and **managing scalable cloud infrastructures** with a strong understanding of the **AWS Well-Architected Framework** and extensive experience in networking and **security** best practices.
* Experience using **MAVEN** as a build tool for the building of **deployable artifacts** (jar, war, and ear) from source code.
* Expertise in **Jenkins for continuous integration** and End-to-End automation for all builds and deployments, and experience installing, configuring, and administering the **Jenkins Continuous integration pipeline tool** on **Linux** machines.
* Experience with container-based deployments using docker, working with **docker images, Docker Hub, and Docker registries.**
* Proficient in managing Amazon Web Services IAM service, including the configuration and management of **IAM Policies, Roles, Users, Groups, and AWS Access Keys**.
* Involved in setting up **Jenkins Master and multiple slaves** for the entire team as **a CI tool** as part of the Continuous development and deployment process.
* Utilized **CloudFormation** to orchestrate and configure the **entire application stack**, ensuring seamless deployment and management.
* Set up **CloudWatch alarms, events, and Simple Notification Service** notifications to monitor and alert on data usage or memory usage.
* Automated the creation of new AWS accounts with **AWS Control Tower’s Account Factory**, streamlining multi-account setups and enforcing best practices.
* Automated process of **EC2 instance** management using **AWS Boto3** and **Python scripting**, resulting in cost savings and improved resource utilization.
* Developed Python classes for web scraping and basic cloud-related operations, including extracting and printing URLs from a web page and defining a class to display values.
* Experience in managing **Docker** orchestration and Containerization using **Kubernetes, and Elastic Container Service.**
* Expert in **Ansible** as a Configuration management tool, to **automate repetitive tasks**, quickly deploy critical applications, and enthusiastically manage the changes on multiple platforms.

**SKILLS:**

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| **AWS Services** | VPC, IAM, EC2, S3, Glacier, ELB, ALB, EBS, RDS, CloudWatch, CloudFront, AWS Lambda, API Gateway, Route53, ECR, ECS, FARGATE, KMS, Cloud Trail, SNS, SQS, SES, AWS System Manager, AWS Athena, Cloud Formation, AWS Code build,  AWS Code Pipeline, AWS Code deploy. |
| **CI/CD Tools** | Jenkins. |
| **Artifact Repository** | Jfrog Artifactory. |
| **Code Coverage** | SonarQube. |
| **Build tool** | Maven. |
| **Networking** | TCP/IP, Network Security, Firewalls, Subnets, VPN, DNS, and Routing. |
| **Operating systems** | Linux/Unix Ubuntu, Centos & Windows. |
| **Programming Languages** | Python, Groovy, Shell scripting, YAML, JSON, SQL |
| **Version Control systems** | GitHub, Git, GitLab. |
| **Cloud Security** | AWS IAM and AWS Config. |
| **Infrastructure tools** | Cloud Formation and Terraform. |
| **Containerization tool** | Docker, ECS Fargate, EKS, Kubernetes. |
| **Configuration Management** | Ansible. |
| **Databases** | AWS RDS, Dynamo DB, Elastic Cache. |
| **Atlassian Tools** | Jira, Confluence. |
| **Methodologies** | Agile methodologies-Scrum, Kanban. |
| **Monitoring & logging** | Cloud Watch, Prometheus, Grafana. |

**WORK EXPERIENCE:**

* **DevOps Consultant Mar 2021 – Present**
* **Place Inc - Ben Kinney Company, Remote**
* Experience in **Amazon AWS Cloud Administration like AWS Cloud platform** and its **features** which includes **EC2,** **VPC, EBS, AMI, SNS, RDS, EBS, Cloud Watch, Cloud Trail, Cloud Formation, Auto scaling, IAM, S3, R53**
* **Designed** and deployed scalable cloud solutions using AWS services such as EKS, S3, Lambda, and ECR, focusing on **microservices architecture** and service mesh technologies like Istio.
* Utilizing **Cloud** **Watch** to monitor resources such as **EC2, CPU memory, Amazon RDS, DB services, Dynamo DB tables,** and **EBS volumes.**
* Configured **YAML templates** to create a stack in **Cloud Formation** which includes services like **Amazon EC2, Amazon S3,** **Amazon RDS, Amazon Elastic Load Balancing, Amazon VPC, SQS, SNS,** and other services of the AWS infrastructure.
* Created **AWS Route53** to route traffic between different re**gion**s. Created **AWS Security Groups** for deploying and configuring **AWS EC2 instances.**
* Deploy, configure, and manage Kubernetes clusters **on AWS EKS**. Perform regular updates of EKS clusters, including upgrading Kubernetes versions, applying security patches, and updating components **like the control plane, nodes, and add-ons.**
* Automate the deployment of EKS clusters and supporting services (VPC, subnets, load balancers) using CI/CD pipelines.
* Using I**AM** to create new accounts, roles, and groups. **Managing IAM accounts (with MFA) and IAM** policies to meet security audit & **compliance requireme**nts.
* Implemented robust networking solutions including VPCs, subnets, and Route 53 configurations, with a focus on high availability and security**.**
* Configured different roles and policies to access **different resources and** control the **access using policies.**
* Involved in configuring auto-scaling for **maintaining high availability** of applications.
* Configured with **Cloud environments using Cloud Watch** and responding to alerts, and cloud trail services.
* Involved in mailing configurations **using SQS, SNS, etc.** for mailing alerts.
* Responsible for automation of **executing and supporting the software development lifecycle** from inception through **production** **deployment**.
* Involved in **performing Release Management** and **Release planning.**
* Maintained dashboards for the **status and result of the builds** and test results for **source code analysis, functional,** regression and performance **test results.**
* Involved in **resolving** **tickets** with different **SLAs for different severity** levels and using **JIRA** as an incident management tool.
* Expertise in **troubleshooting** the problems generated while **building, deploying,** and also in **production support.**
* Have **good experience** in all stages of the **Build lifecycle** - from analysis, development, implementation, and support of **builds, unit testing, and deployments**.
* Troubleshooting the failure of deployment of applications to an environment. **Manage build agents API Management** **with istio** for service level tracking.
* Manage and optimise **network policies, service meshes (like Istio), ingress controllers**, and security groups for secure and efficient communication between pods and external services.

**Build and Deploy Applications on Kubernetes (EKS) with CI/CD Pipeline Using Jenkins, and Docker.**

* Implemented **CI/CD pipelines with Jenkins for automated build, test, and deployment**. Integrated with version control and created **Docker files for containerization, optimizing images** and security.
* Configured **Jenkins pipelines** for automated testing, static code analysis, and security checks. Maintained Jenkins files for pipeline consistency and version control.
* Implemented **CI/CD pipelines** with Jenkins for automated build, test, and deployment. Integrated with version control and created Docker files for containerization, optimizing images and security.
* Maintained Jenkins files for pipeline consistency and version control and managed applications on **Kubernetes clusters** using **Helm charts**. Configured Kubernetes resources (**Pods, Services, Deployments, Config Maps, Secrets)** for secure, **scalable infrastructure.**
* Collaborated in an **Agile team,** providing input for sprint planning and driving continuous improvement through retrospectives.
* Implemented monitoring with **Prometheus and Grafana** for **performance tracking**. Set up centralized logging with the **ELK stack** for troubleshooting and **analysis.**

**Environment:** AWS, EKS, Lambda, VPC, S3, Route 53, SQS, SNS, **Kubernetes, istio,** Maven, Git, GitHub, Ansible, Linux, JIRA, Docker.

* **AWS DevOps Consultant Jul 2020 – Feb 2021**
* **Infosys Limited, Charlotte, NC – US**

* Streamlined **agile** development with **automated CI/CD** using Jenkins, resulting in an increase in deployment frequency and enhanced code stability.
* **Reduced technical troubleshooting** time by implementing standardized procedures, leading to increased productivity and faster issue resolution for clients.
* Streamlined development workflows and increased team productivity by 30% by implementing **Docker Compose for microservices containerization**, **terraform for infrastructure as code practices**, and Jenkins for orchestrating CI/CD pipelines, resulting in more efficient software delivery and faster deployment cycles.
* Implemented robust networking solutions including VPCs, subnets, and Route 53 configurations, with a focus on high availability and security
* Utilized **AWS Athena** to investigate **security breaches**, resulting in enhanced data security measures and minimized business risks.
* Integrated AWS services like **AWS Organizations, AWS CloudTrail, AWS Config**, and **AWS CloudFormation** with Control Tower for seamless governance and monitoring of cloud environments.
* Developed Python **classes** for **web scraping** and basic cloud-related operations, including extracting and **printing URLs** from a web page and defining a **class to display values**.
* Utilized **Terraform** for infrastructure-as-code, automating the provisioning and configuration of cloud resources.
* Optimized **Jenkins deployment to ECS**, resulting in an increase in build speed for **Fargate instances,** boosting overall team productivity.

**Build and Deploy Applications CI/CD Pipeline Using Jenkins, and Docker compose.**

* Implemented **CI/CD pipelines with Jenkins for automated build, test, and deployment**. Integrated with version control and created **Docker files for containerization, optimizing images** and security.
* Configured **Jenkins pipelines** for automated testing, static code analysis, and security checks. Maintained Jenkins files for pipeline consistency and version control.
* Implemented **CI/CD pipelines** with Jenkins for automated build, test, and deployment. Integrated with version control and created Docker files for containerization, optimizing images and security.
* Maintained Jenkins files for pipeline consistency and version control and managed applications on **Kubernetes clusters** using **Helm charts**. Configured Kubernetes resources (**Pods, Services, Deployments, Config Maps, Secrets)** for secure, **scalable infrastructure.**
* Collaborated in an **Agile team,** providing input for sprint planning and driving continuous improvement through retrospectives.
* Implemented monitoring with **Prometheus and Grafana** for **performance tracking**. Set up centralized logging with the **ELK stack** for troubleshooting and **analysis.**

**Environment:** AWS ECS Ec2, Auto Scaling, **AWS System Manager**, AWS Dynamo DB, API Gateway, Docker, Terraform, Ansible, Kubernetes, EKS, Git, Linux/Unix, Maven, Jenkins, Groovy, Python, Agile, Confluence, Jira, **Prometheus, Grafana**.

* **AWS DevOps Engineer Aug 2014 – March 2018**
* **DXC Technology, Chennai, India**

* Streamlined deployment process through the creation and execution of innovative, scalable, and secure technical solutions with EC2 instances, S3, RDS instance, VPC, IAM, ELB, Route 53, VPN, **CloudTrail, ECR, and ECS**, resulting in increased operational **efficiency and faster time** to market for new products and features.
* Streamlined VPC, Subnets, and **NAT configuration** through innovative **AWS Cloud Formation** templates, **leading to a 15% decrease in infrastructure provisioning** time and cost savings for the company.
* Aligned with secure code and system development requirements by implementing security measures in AWS, including configuring security groups, **network ACLs**, and route tables, contributing to security standards.
* Enhanced operational visibility and security posture by **establishing a custom cloud trail** and managing log transfer, leading to improved governance and risk management.
* Developed a **Python script using boto3** to automate retrieval and **display of detailed** information for all **running EC2 instances**, including names, **types, IP addresses**, and launch times.
* Created and configured an Amazon **DynamoDB** table using AWS python **boto3**, defining a composite **primary key**, **attribute types,** and provisioned throughput settings, and included a status check to ensure table readiness.
* Developed a **Python function** to **hit an API endpoint**, parse JSON responses, validate link statuses, and handle timeouts, with **logging for error** tracking.
* Implemented Python scripts for **basic file operations** including reading, creating, writing, and appending to text files.

**The three-tier application was deployed using AWS ECS Fargate services using Jenkins.**

* Designed and implemented **CI/CD pipelines with Jenkins** for automated build, test, and deployment. Developed Docker files for containerizing frontend, backend, and database components. Managed **Docker images with AWS ECR.**
* Deployed and managed the application on **AWS ECS, configuring ECS clusters**, task definitions, and services. Leveraged AWS Fargate for serverless container management to simplify infrastructure management and reduce operational overhead.
* Used **AWS CloudFormation** or **Terraform to define** and provision infrastructure as code, ensuring consistent and repeatable deployments. Automated the provisioning of **ECS clusters, networking components, and IAM roles using IAC** tools.
* Implemented monitoring and logging solutions using **AWS CloudWatch to track application performance, log data**, and set up alerts for critical issues. Configured centralized logging for container logs and application logs for better visibility and **troubleshooting.**

**Environment:** AWS VPC Subnets, Routes, S3 Storage classes, Load Balancer, **Auto Scaling,** ECS Fargate, **Cloud Watch Alarms**, Cloud Trail, SNS, AWS IAM, Python, AWS Lambda, AWS Code pipeline, AWS Code build, AWS Code deploy, java Spring boot, AWS Cloud Formation.

**EDUCATION:**

Central Connecticut State University Master’s in Computer Information Technology Jan 2019 - May 2020 | 3.5

JNTU- Anantapur Bachelor’s in Computer Science and Engineering Jun 2010 - May 2014 |3.25

**CERTIFICATIONS:**

* Certified Kubernetes Administrator (CKA).
* AWS Certified DevOps Engineer Professional.
* Hashicorp Certified Terraform Associate