## SREENATH RANGANA DevOps Engineer



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## **Career Objective:**

DevOps engineer with 2 years of experience in automating and optimizing the different types of deployment and release over the large cloud and hybrid infrastructure. Proficient in Configuration management tools, and developing CI/CD pipelines. To seek a challenging position in a company, where I can apply my creative skills, enrich my knowledge and grow continuously along with the company through consistent and dedicated smart work.

## **Professional Summary:**

- Implement CI/CD for microservices application.
- Good working experience in the Kubernetes cluster environment, and deploying the micro-services into the cluster environment.
- Experience in Linux systems and Software Configuration Management, Build and release, DevOps, and Linux environment. Manage Services in Ubuntu.
- Worked on Amazon Web services Creating, configuring, and Managing EC2, S3, VPC, IAM, and ROUTE 53 services across AWS Zone.
- Ability to create projects in GIT, set configuration for GIT, setting GIT environment variables.
- Worked on Version Control System-GIT & VCS Remote Repository GitHub
- Experience in using Continuous Integration tools like JENKINS
- Set up build jobs and configure build jobs in JENKINS
- Jenkins User Management Create a User account, Delete user Account, Setup Authorization access to users
- Ability to manage plugins in JENKINS such as installing the plug-in, un-installing plug-in, upgrading, configure the
  plugin. & Set up build triggers in Jenkins and Email notifications on the build.
- Set up Jenkins distributed builds, and configure master-slave.
- Hands-on using MAVEN build tool such as building a project as per maven required life cycle.
- I have knowledge on configuration management tools like Ansible
- Hands-on setup of Ansible Control Machine and Hosts
- Hands-on playbooks for configuration and application deployments
- Good Exposure to Containerization tools like Docker Engine
- Build Images using Dockerfile, Pull and push images from Docker Hub.
- Basic Knowledge on Prometheus, Grafana & ELK
- Good working experience in the Kubernetes cluster environment, and deploying the micro-services into the cluster environment.
- Built Docker files to create containers using the Docker engine and other alternative build tools through GitHub
  actions.

## **Certifications:**

- AWS Certified Solutions Architect Associate.
- Google Cloud Certified Associate Cloud Engineer.
- Google Cloud Certified Professional Cloud Architect.

## **Technical Skills/Knowledge:**

➤ Cloud Technologies : AWS, GCP, Azure(Beginner)

> AWS (Cloud) : EC2, VPC, S3, IAM, SNS, Cloud Watch, EBS,

Cloud Front, Elastic Load Balancer, Auto Scaling, AWS Cognito,

AWS API Gateway, Lambda Authorizer.

➤ Operating Systems : Linux, Windows & Ubuntu
 ➤ IDE : IntelliJ, Visual Studio
 ➤ Infrastructure Tools : Terraform, Ansible

> Technical Languages : Shell Script, Bash Script, Java Script(beginner)

Authorization : OPA (Open Policy Agent), REGO
 Container Technologies : Docker, Docker-Compose & Kubernetes
 Build & Orchestration Tools : GIT, Jenkins, ArgoCD, Maven

Monitoring
 ELK, Prometheus, Grafana
 Data Bases
 My-SQL, Mongo DB

> Ticketing Systems : Fresh-Desk, Zen-Desk, Pager-Duty

# **Professional Career:**

Company – ZelarSoft Private Limited, Hyderabad

**Designation** – DevOps Engineer **Duration** – March 2021 to Till Date

**Project-1: Styra DAS**(Declarative Authorization Service)

**Styra DAS:** Styra DAS uses a single language for expressing policy through a single software system for managing those Policies across a broad spectrum of software systems, including Kubernetes, microservices, public cloud, Linux, and databases. Styra DAS is the world's first enterprise-grade policy-development lifecycle and includes policy-based authoring, testing, distribution, monitoring, and logging.

Environment: Slack, Fresh Desk, ZenDesk, Styra DAS.

**Role: Support Engineer** Responsibilities:

- > Handling customer requests, responding to their queries, providing reference documents to the customers, resolving the errors faced by the customers looking at the various logs with the help of the engineering team, and creating tickets for tracking purposes as a support engineer.
- Raising a ticket and addressing them or if it is a production issue alarm the higher levels or an on-call Engineer and Development teams so that issue can be solved ASAP if is not in production then work on the ticket to solve it.

#### **Project-2: Kubernetes Security**

**OPA** (**Open Policy Agent**): Open Policy Agent (OPA) is an open-source, general-purpose policy engine that unifies policy enforcement across the stack. OPA provides a high-level declarative language (Rego) that lets us specify policy as code and simple APIs to offload policy decision-making from our software. We can use OPA to enforce policies in microservices, Kubernetes, CI/CD pipelines, API gateways, Terraform, service mesh (Envoy, Istio, Kong), and more.

**Environment: On-Premises** 

Role: OPA Engineer

**Worked Technologies:** GitHub, Kubernetes, Client Tool, YAML, CIS Benchmarks, NIST compliance Pack, PSP/PSA, Rego **Responsibilities:** 

- Assistance with StyraDAS & Implemented rego policies in Styra DAS for Kubernetes systems w.r.t pod security which includes NIST standards.
- Studied Compliance and regulatory standards according to CIS&PSP. Then Compiled a list of NIST rules as per the NIST guidelines, Detection, and prevention rules to maintain Kubernetes compliance.

## **POC Projects:**

✓ As a part of Training I was asked to work on the below projects with end-to-end implementation.

**1-ToDo App**: Todo is a simple app where we can create our to-do list like a shopping list, Daily tasks, etc. Where we had four components like frontend, users, login, and todo. All the code is stored in the Git Repository(GitHub)

**Worked Technologies:** Git, Jenkins, Groovy, Nexus, Ansible, ELK, Java, Go, Redis, Nginx, npm Prometheus, Grafana. **Accomplishments:** 

- · Instances with the component names were created in AWS using Ansible
- · Code is pulled, built, and pushed to the Nexus which is an artifact repository. When code is committed changes are made with a new version.
- · Once we have artifacts using ansible we pull the latest artifacts from nexus and expose the application with its web servers or systemd services through ports.
- · We expose the services to Prometheus through node exporters and dashboards were created in Grafana.
- · Later monitoring was done using ELK where we get the logs using filebeat and is visualized by Kibana.

#### 2-Styra Ebook:

Styra Ebook gives a beginning-to-end example of all the steps to enroll a new app for an application/microservice authorization use case. Customers can use this as a basis to build their custom automation. Documented the step-by-step process for the same & stored it in the Git Repository(GitHub).

Worked Technologies: Styra DAS, Terraform, ArgoCD, GIT, Kubernetes, Istio.

#### **Accomplishments:**

- Created an Istio system in Styra DAS, and integrated it with a sample ReactJs application deployed in the Kubernetes cluster.
- The process of deploying the application in the cluster is automated using GitHub actions, Terraform and ArgoCD.
- · Configured SSO using Google (OIDC), Okta (OIDC, Auth0 SSO Saml, Okta SSO Saml with Styra DAS tenant.
- · Integrated GIT and stacks with the DAS systems through UI and API.
- · Documented the step-by-step process for the same.

#### **3-CMR Surgicals:**

Implemented a POC for the client's architecture and written rego policies for given use cases such as allowing a specific person to access all the videos of the surgeries performed at a specific hospital.

Worked Technologies: OPA, Rego Language, AWS Cognito, AWS API Gateway, Lambda Authorizer, S3 buckets.

#### 4-PERN App:

This is a sample three-tier CRUD application where we can read, update, edit, and delete the employee details with their department's list. All the code is stored in the Git Repository(GitHub).

**Worked Technologies:** React, Nodejs, Mongodb, Terraform, Bit bucket/GitLab, Docker, Kubernetes **Accomplishments:** 

- · Created environment through terraform in AWS
- · Written bitbucket pipeline in Bitbucket/GitLab which creates the Docker image and pushes that image to Docker hub with versions when code is updated.
- · Created k8's cluster using k3d.
- Deployed application in Kubernetes

## 5-Blogs:

Written Medium blogs that will be successfully published.

## **Educational Qualification:**

Qualification	Name of the College	Board/ University	Year of Pass	Aggregate (%)
MCA	Sri Padmavathi College Of Computer Sciences and Technology	Sri Venkateswara University, Tirupati	2020	80

# **Key Strengths:**

- Always interested to learn new things.
- Self-motivated, Positive attitude towards work.
- Participating in social welfare activities.

# Personal profile:

Father's Name : R. Venkatesh

Mother's Name : R. Padmavathi

Date of Birth : 13 Aug 1996

Nationality : Indian, Hindu

Languages Known : English and Telugu

## **Declaration:**

I, Sreenath Rangana do hereby confirm that the information given above is true to the best of my knowledge.

Place:	Signature
Date:	(Sreenath Rangana)