

Mr. SWAPNIL RAGHUNATH SONAWANE

Senior DevSecOps/SRE/Cloud Infrastructure Engineer

Employed With: Saama Technologies [Product Based]

Current Title: Senior Software Engineer

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Career Abstract:

- Dedicated and results-driven **DevOps professional with 7+ years** of experience in implementing and managing development, testing, and automation tools. I have done my **Master of Engineering** from Pune University.
- Proven expertise in cloud management on **AWS**, troubleshooting, code validation, and enhancing development processes.
- Skilled in identifying and resolving technical issues, performing root cause analysis, and mentoring team members.
- Skilled in deploying tools configuration using **Ansible** and infrastructure provisioning using **Terraform** and **Terragrunt** wrapper.
- Deployed and supported end to end application modules and infrastructure resources for **Dev, Sit, Stage, Prod and Preview environments in DC/AWS cloud**.
- Knowledge of **Linux system administration**, User and Group Administration & network configuration, Tech support, Testing and Software Development as well.
- Key player in taking decisions in team and have done major **DevOps** automation tasks which has helped my team to overcome the manual tasks.
- Having good knowledge on **Shell scripting, Python, Golang, Javascript** and worked on **Jenkins API, Maven, Jira, Jfrog, Terraform, AWS services**.
- Concrete and articulate in written, verbal communication and presentation skills.

Technical Competencies:

Operating system	Linux, UNIX and Windows
Programming languages	Shell Scripting, Python, Golang, JavaScript
Version Control Systems	Git, GitLab, GitHub
Databases	Mysql, PostgreSQL, MongoDB, Dynamo dB
Containerization & Clusters	Docker, Kubernetes, EKS
App & Web Servers	Apache, Nginx
Network & Infrastructure	TCP/IP, DNS, HTTP, NAT, Routing, Switching
Configuration & Infrastructure	Ansible, Terraform, Terragrunt
DevOps Tools	Jenkins, Ansible, Nagios, Jira, Jfrog, Maven, Vsphere Suit, CI/CD, Grafana, Datadog, Gitlab, Github Action, SOPS, Trivy, Rancher
Cloud Platforms	Skilled in AWS & Basics in GCP, Azure

Organizational Experience:

Company:		Saama Technologies, Pune [Product Based]		
Designation:		Senior software Engineer		
From:	23 Aug 2021	To:	Till Date	Duration: Ongoing

Company:		Diamanti Software LLP Company, Pune [Product Based]		
Designation:		Senior software Engineer		
From:	27 Jan 2020	To:	20 Aug 2021	Duration: 1.7 years

Company:		Dimention Data India Private Ltd, Pune		
Designation:		Software Engineer		
From:	7 Aug 2017	To:	26 Jan 2020	Duration: 2.5 years

Company:		Wipro Infotech (On the payroll of ACE Computer Services), Pune		
Designation:		Data Center Operator		
From:	3 Oct 2016	To:	6 Aug 2017	Duration: 11 months

Project Details:

Saama Technologies [Product Based] - <https://www.saama.com>

Synopsis: Saama is a clinical data and analytics company known for its unified, AI-driven platform. Their platform integrates and curates diverse data sources, providing real-time insights across therapeutic areas. This enables sponsors to streamline New Drug Applications (NDAs) and expedite drug market entry at reduced costs.

Project Title:		DevOps/Tech Infra Support [TIS]			
Objectives:		INFRA SERVICES DEVELOPMENT			
Client:		Pfizer			
From:	Aug 2021	To:	Till date	Duration:	Ongoing

Description:	The primary aim was to create the infra in AWS with the terraform in place and with one touch deployment [OTD] via Jenkins jobs. The infra was primarily designed for the Pfizer internal applications which were based on payroll rollout data of the employees.
Responsibilities:	<ul style="list-style-type: none"> • Developed Terraform scripts using Terragrunt wrapper to provision various AWS components. • Gathered requirements through collaboration with dev teams to inform script development. • Stored scripts in GitHub repository, integrated with Jenkins via webhook for automation. • Utilized AWS components including VPC, Subnets, AZs, Route53, Load Balancers, ASG, and launch configurations. • Managed Terraform state files in S3 bucket for centralized control. • Implemented DynamoDB table in backend block to ensure state file locking. • Used SOPS tool for encryption and decryption of Vaults in Terraform/Terragrunt. • Orchestrated setup of distinct environments (e.g., dev, sit, preview, prod) with Terragrunt for consistency and reproducibility. • Designed and implemented CDNs, API Gateway, and ACM to facilitate end-to-end application flow. • Handled IAM, EC2 management, EBS volume creation, AMI creation, Snapshots, CloudWatch alarms, logging system setup, CloudWatch graphs, VPC, NAT Gateway, and Security Groups configurations.

Project Title:	LSAC (Life Science Analytics Cloud)				
Objective:	JENKINS CICD PIPELINE				
Client:	Pfizer, Regeneron				
Role:	Senior Software Engineer				
From:	Aug 2021	To:	Till date	Duration:	Ongoing
Description:	Life Science Analytics Cloud (LSAC) suite of applications were handled by the DevOps/SRE team, the 16 microservices were onboarded into the CICD pipeline with end to end integration of all tools where we had various suites like Security, build, docker, ansible and k8s deployment. The Jenkins shared library along with the Jenkinsfile design for each microservice was done by both in an individual contribution and as a team work.				

Responsibilities:	<ul style="list-style-type: none"> • Integrated all tools with the Jenkins and designed various automation scripts in shell and python to check the various stages conditions in pipeline. • Sonarqube QG was checked with shell script for each module and each microservice was on boarded to sonar. • Automation of GITLAB/SONAR/JENKINS/JIRA rest apis was done where I have received appreciation emails. • Maintained the build servers of jenkins where we had docker installed which converted the Jar into image • Jfrog rest api automation for cleanup of old binaries was done. • Kubernetes manifest file design as per the development teams was handled where we had various kinds of deployments, daemonset, services etc • Troubleshooting the pod deployment along with RCA was performed. • Responsible for building scalable data solutions using AWS Cloud Services, Spark, Talend Big Data, Redshift, and NoSQL • Understood the business requirements through the high level design • Imported data from AWS S3 into Spark RDD, and performed transformations and actions on RDDs and DataFrame • Created staging layer to accommodate and process raw data from all data sources • Engaged in deployment activities using deployment framework and Git
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Project Title:		KMMS [Kubernetes Managed Metric System]			
Objective:		KUBERNETES AND APPLICATION MONITORING			
Client:		Regeneron			
Role:		Senior Software Engineer			
From:	Oct 2022	To:	Jan 2024	Duration:	1.3 years
Description:		The project had a baseline of applications which were dealing with the Security of Network, Cloud workloads, Hybrid Workforce, Leverage Threat Intelligence & Security Consulting.			
Responsibilities:		<ul style="list-style-type: none"> • The Prometheus was installed on all the two clusters of our AWS EKS with the help of helm charts • The DB for the prometheus we used was influx database where we inserted the Time series data 			

	<ul style="list-style-type: none"> • The two clusters along with 10 nodes had the Prometheus exporters which continuously extracted the data based on the pull mechanism. • The Grafana was installed on the system and integrated with the help of GQL to show the data on the grafana dashboard like cluster and node along with pod monitoring • The helm charts management was done via the helm repo where each sub folder was formed based on the LSAC project repositories. • The splunk was integrated with each application to get the application logs
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Performed POC's:

- Upgraded and migrated **Teamcity Server**, configuring agents for Kubernetes clusters.
- Implemented Cluster **Autoscaler setup using Terraform**.
- Developed **Terraform Modules and Terragrunt code for SFTP creation in AWS Transfer Family** with password-based authentication.
- Integrated **Grafana** with OAuth/SSO & LDAP/Foxpass authentication.
- Configured **Jenkins with LDAP** authentication using Terraform.
- Automated Onboarding/Offboarding/Project change processes via JavaScript and Google Forms, with Jira ticket creation.
- Created **SumoLogic** dashboards for infrastructural and application logs.
- Managed **StrongDM SaaS** application for database access control.
- Utilized **Rancher as Central Monitoring tool for EKS cluster management**, integrating with Foxpass for access control.

Ad Hoc Requests:

- Commissioning new customer account with below steps:
 - Create Production, Dev and Stage databases and deploy.
 - Create **LastPass** entries for DB connection profile and LDAP groups for databases.
 - Deploy accounts in app and provide the access to team.
 - Set up the backup jobs.
- Resolved database refresh requests, **PgAdmin/dbeaver issues**, and VPN login problems.
- Implemented resource limit restrictions for apps on Kubernetes/EKS clusters using Ansible playbooks.
- Developed Ansible playbooks for app/database deployment, package installation, and Docker image building.
- Automated **Airflow DAG creation with Python and shell scripts** for deploying apps across Prod/Dev/Stage environments, with Slack notifications for Success/Failure alerts.
- Created **sFTP account inventory**, deployed it on sFTP servers, and managed access through LastPass entries.
- **Upgraded EKS clusters** from lower to higher versions.

Diamanti Software LLP [Product Based] - <https://www.diamanti.com>

Synopsis: Diamanti offers software solutions addressing container-based hybrid cloud challenges. Their enterprise-optimized platform efficiently manages Kubernetes at any scale, promoting rapid adoption and

expansion both on-premises and in the cloud. With built-in security, high availability, and resilience, Diamanti empowers enterprises to break free from legacy architectures.

Project Title:		Spektra			
Objective:		MULTI-CLUSTER MANAGEMENT			
Client:		Diamanti			
Role:		Software Engineer			
From:	Jan 2020	To:	Aug 2021	Duration:	1.7 years
Description:		Diamanti Spektra is a multi-cluster management tool for creating and managing Diamanti clusters, including those hosted on AWS, GCP, Azure, etc. As part of the SDET team, I was performing end-to-end scenario-based test cases to evaluate Spektra's features like Super Admin, Tenants, Projects, App Migration, and Disaster Recovery (DR).			
Responsibilities:		<ul style="list-style-type: none"> Conducted Blackbox, Whitebox, Functionality, Regression, and Performance testing, automating test cases using Golang for backend CLI and JavaScript for GUI for Kubernetes objects. Developed library functions for Kubernetes (k8s) objects such as App Deployments, Disaster Recovery (DR), User Management, Statefulset, and Replica Set, and authored scenario-based end-to-end test cases in Golang. Enhanced the automation engine developed in GoLang. Created a tech support utility for debugging various issues in multi-cluster environments. Contributed to Kubernetes tasks including namespace management, scheduler, controller, and Cluster lifecycle management (e.g., kubeadm, virtual networking with calico and flannel, CNI, and familiarity with YAML configuration files). Implemented features like Replica Set, Deployment, rolling updates and rollbacks, Statefulset, ClusterIP, Nodeport, and LoadBalancer in Kubernetes environments. Managed Kubernetes networking aspects such as Host Network, ingress network, and endpoint networking. Handled Docker container management, including customization of images, Dockerfile creation, Docker network configuration, swarm management, services, replicas, push/pull operations, Docker Hub interaction, volume and network management, and authoring Docker-compose files, including scaling in compose setups. 			

Dimension Data India Pvt Ltd - <https://www.dimensiondata.com//>

Project Title:		Cloud Migration and Optimization			
Objective:		Lead the migration of on-premises infrastructure to AWS cloud, optimizing performance, scalability, and cost-efficiency			
Client:		Dimention Data			
Role:		Software Engineer			
From:	Aug 2017	To:	Jan 2020	Duration:	2.5 years
Description:		Successfully orchestrated the end-to-end migration of Dimension Data's internal application to the AWS Cloud, aligning infrastructure with modern cloud best practices. Utilized Infrastructure as Code (IaC) principles to implement robust security measures and optimize costs, leading to improved system performance and operational efficiency			
Responsibilities:		<ul style="list-style-type: none"> Designed and implemented a fault-tolerant AWS architecture tailored to the application's needs. Automated infrastructure provisioning with Terraform for consistency and repeatability. Executed a seamless migration plan with minimal downtime and ensured smooth transition. Implemented robust security measures and compliance standards aligned with internal policies. Established comprehensive monitoring and logging solutions for real-time visibility and proactive issue resolution. Developed CI/CD pipelines using Jenkins for automated deployments on EC2 instances. Managed Git repositories, including branch maintenance and providing Git usage guidance to developers. Built and deployed applications using Maven and Jenkins for build activities. Orchestrated application deployment to Tomcat servers using Ansible scripts. Integrated GitHub, Ansible, and Maven with Jenkins for automated build processes, utilizing Nexus for artifact storage and versioning. Reviewed Dockerfiles, created Docker images, and deployed applications using Docker for containerization 			

Wipro InfoTech, Pune (On the Payroll of ACE computer services)

Project Title:		GSTN (Goods and Services Tax Network)			
Objective:		JENKINS CICD PIPELINE			
Role:		Data Center Operator			
From:	Oct 2016	To:	Aug 2017	Duration:	11 Months
Description:		Release and deployment management of GSTN application, Monitoring and support the infra as well as the remote devices in the network.			
Responsibilities:		<ul style="list-style-type: none"> • Conduct daily Health Check activity to ensure smooth operation of application and database servers. • Resolve E-Helpline tickets within specified SLA timelines. • Develop CI/CD pipelines in Jenkins for automated deployment on remote application servers using declarative pipeline. • Manage branches in remote Git code repository for version control. • Handle post-deployment issues with interfacing applications. • Perform in-depth analysis of stuck orders by examining logs and exceptions to resolve issues promptly. • Generate monthly and daily reports according to client requirements. • Drive Change Management and Problem Management processes within SLA guidelines. • Gather feedback from programming team and provide sign-off. • Utilize hands-on experience with Data Center devices such as Cisco routers and switches. 			

Educational Qualifications:

- **Master's Degree in Engineering** from Vishwakarma Institute of Information Technology, University of Pune (PUCSD) in 2016 with first class with distinction (72%). Did specialization in Signal Processing (E&TC)
- **Bachelor of engineering** from North Maharashtra University, Jalgaon in 2013 with First Class (64%).
- **HSC** from Maharashtra State Board in 2008 with 71.06%.
- **SSC** from Maharashtra State Board in 2006 with 77.76%.

Certificates, Training, and Corporate Achievements:

- Certification:
 - **CKAD (Certified Kubernetes Application Developer)** Issued by The Linux Foundation in Oct 2023
 - **CKA (Certified Kubernetes Administrator)** Issued by The Linux Foundation in Jan 2023
 - **AWS Certified Solutions Architect – Associate** in 2019
 - **CCNA Certified (Cisco Certified Network Associate)** in 2016
- Achievements:
 - **Shining Star Award** Issued by Saama in December 2023.
 - **Shining Star Award** Issued by Saama in March 2023.
 - **Shining Star Award** Issued by Saama in Nov 2022.
 - **Beyond Call of Duty Award** Issued by Diamanti Software LLP in Dec 2020.

Personnel Vitae:

Date of birth:	16 April 1990
Gender:	Male
Nationality:	Indian
Marital Status:	Married
Interest & Hobbies:	Traveling, Car driving, Watching and playing Cricket, Watching comedy movies and shows
Address:	Flat No 24, Avdhoot Apartment, Near Pawar hospital, Balaji Nagar, Pune. Pin code: 411043