SHANMUKHA MAKANI

Total Experience : 9 Years | LinkedIn: linkedin.com/in/shanmukhamakani | Phone: + 1 (469) 499-4949 | Email: shanmukha.makani@gmail.com

aws CERTIFIED

PROFESSIONAL SUMMARY

- AWS Certified Cloud Practitioner, Solutions Architect, SysOps Administrator and Developer Associate with 9 years of experience in Cloud Computing, DevOps Implementation, Build and Release Engineering, Continuous Integration and Continuous Deployment.
- Extensive experience in developing and maintaining build, deployment scripts for DEV, QA, Integration, Pre-Prod, Prod environments using Ant, Maven, Shell, Python and PowerShell scripts.
- Experience in implementing Jenkins workflow and plugins for repeatable deployments of multi-tier applications, artifacts and services to Docker and AWS.
- Expertise in automating the deployments on AWS using GitHub, Terraform, CFT and Jenkins.
- Expert level knowledge on different AWS services like EC2, S3, RDS, AMI, SNS, SQS, CloudWatch, CloudTrail, Elastic Load Balancing, and Identity Access Management.
- Expertise in writing Ansible playbooks for one click automatic deployment process and managing infrastructure for DEV, QA, UAT and PROD environments.
- Experience in writing Chef Cookbooks, Recipes, Resources, run lists, managing Chef-Client nodes, and uploading cookbooks to chef-server for continuous deployments.
- Experience in migrating data from local machines into cloud database using Database Migration Service (DMS). Managed SQL/NoSQL databases.
- Expertise in all areas of Jenkins like plugin management, securing and scaling Jenkins, integrating code analysis, performance issues, analytics and test phases to complete the CI/CD pipelines within Jenkins.
- Proficient in scripting languages like Bash, Python and Shell to automate daily activities.
- Expert knowledge on monitoring and metric collection tools like Prometheus, Grafana, EFK stack.
- Extensive experience in Linux/Unix System Administration, System Builds, Server Builds, Installations, Upgrades, Patches, Migration, Trouble shooting.
- Experience in containerization using Docker to containerize custom web applications and deployed on AWS with Ubuntu, CentOS instances through SWARM Cluster and automated application deployment in the cloud using DockerHUB and DockerSwarm.
- Expertise in using Kubernetes to orchestrate the deployment, scaling and management of Docker Containers.

EDUCATION

Master of Science Computer Science	Duquesne University (3.74 GPA) Pittsburgh, USA.	December - 2020
Bachelor of Technology Computer Science Engineering	Jawaharlal Nehru Technological University India.	April - 2011

CERTICATIONS AND TRAINING

AWS Certified Cloud Practitioner

AWS Certified Solutions Architect - Associate

AWS Certified Developer - Associate

AWS Certified SysOps Administrator - Associate

Verify online: https://www.credly.com/users/shanmukha-ramya-makani

TECHNICAL SKILLS

Cloud Technologies	:	AWS, Azure
Configuration Management Tools	:	Ansible, Chef, Puppet
CI/CD Tools	:	Jenkins, Travis CI, TeamCity, Bamboo, TFS
Orchestration	:	Kubernetes, Docker, Docker Swarm templates
Monitoring Tools	:	EFK, Prometheus, Grafana, Nagios
Operating Systems	:	Windows, Unix, Linux
Scripting Languages	:	Python, Bash, Shell, Powershell
Programming Languages	:	Java, Python, HTML, JavaScript, SQL
SCM Tools	:	GIT, BitBucket, SVN
Build Tools	:	Ant, Maven, OBIEE
Databases	:	Oracle, MySQL, NoSQL, PostgreSQL, MongoDB, DynamoDB
IDE	:	OATS, Eclipse, SQL Developer, Oracle APEX, Jupyter
ERP	:	Oracle EBS Procurement and CRM

WORK EXPERIENCE

PROJECT 1 :

Client	:	CapitalOne	McLean, VA
Employer	:	Idexcel, Inc	
Role	:	Senior DevOps Engineer	
Duration	:	June 2021 – Till Date	

ROLES AND RESPONSIBILITIES

- Worked in a dedicated real time list screening team, managing third-party COTS application installation and administration of the infrastructure.
- Responsible for compliance of the infrastructure and regularly updating OS and fixing the vulnerabilities.
- Wrote AWS Lambda functions to switch the CNAMES, build the server stacks and RDS Database.
- Worked on end-to-end single click deployments using Jenkins and Terraform.
- Actively involved in analysis, detail design, development, bug fixing and enhancement in Agile methodology.
- Responsible for regular Rehydrations and server patching.
- Involved in on-call rotation supporting application and infrastructure health 24/7.
- Created AWS Route53 weighted policies for high availability Active-Active regions.
- Wrote Terraform scripts for building multiple workspaces in multiple environments.
- Developed Infrastructure pipelines using AWS, Terraform, and Jenkins.
- Enforce standard methodologies, processes and tools and ensure compliance to enterprise architecture, global information security policies and overall firm strategy.
- Involved in L2 Production incidents and joined on calls to resolve the incidents and supported the applications.
- Utilize Splunk for monitoring applications and regular logs in windows and Linux servers and automate the process by writing PowerShell/Shell Script and integrate in the CloudFormation Template.
- Collaborate with Technology Engineering, Development, and Product Management to help develop, scale, and improve production systems and services.
- Automate rehydration process for Linux and window's servers by using CI/CD pipelines which uses Terraform, Jenkins, CFT.
- Worked on AWS S3 custom policies for IAM roles and users access.
- Worked on IAM roles for AWS resources access.
- Collaborate with teams to implement security best practices to use enterprise standard AMI's, Security Groups, cloud solutions.
- Develop internal products using Python to create Lambda functions to support different applications for monitoring.

- Involved in daily scrum and sprint planning meetings.
- Install and configure virtual cloud instances, support cloud servers including security configuration, patching, and troubleshooting.

PROJECT 2 :

Employer	:	Idexcel, Inc	Herndon, VA
Role	:	Senior Cloud Engineer	
Duration	:	April 2021 – June 2021	

ROLES AND RESPONSIBILITIES

- Validate the architecture and use cases of Cync Application Suite and AWS services in the customer support cycle.
- Support the Cloud Custodian application using cloud engineering and scripting knowledge to monitor and build policy for cloud compliance.
- Work on problems of moderate and varied complexity where analysis of data may require adaptation of standardized practices.
- Participate in requirement gathering and creation of design documents. Design and implement a highly scalable, highly available applications.
- Participate in day-to-day activities involving design, development, test support, deployment and production monitoring and support for applications.
- Develop and maintain documentation of Cync cloud environments, integration platforms, data flow map, server inventories, network design diagram, entity-relationship diagram, process workflows.
- Work in a team environment and responsible for specifying, designing, implementing, maintaining Cloud and related infrastructure.
- Involve in AWS Cloud Architecture, Components, and Policies, Production Management, Performance monitoring, change management.
- Participate in planning, implementation, and growth of our customer Amazon Web Services (AWS) foundational footprint.

PROJECT 3 :

Client	:	Qualcomm	San Jose, CA
Employer	:	Oracle Corporation (Full Time)	
Role	:	Senior Software Engineer	
Duration	:	July 2016 - May 2018	

ROLES AND RESPONSIBILITIES

- Create and maintain highly scalable and fault tolerant multi-tier AWS environments spanning across multiple availability zones using Terraform and CloudFormation.
- Been a part of both India and US operations. Provides prototyping for small and medium projects and serves as technical lead for small – medium sized projects as delegated by project manager.
- Involved in creating and launching EC2 instances using AMI's of Linux, Ubuntu, RHEL, Windows and wrote shell scripts to bootstrap instance.
- Involved in implementation of various branching strategies, and automated various tasks related to release in GIT.
- Created S3 buckets in the AWS environment to store files, sometimes which are required to serve static content for a web application.
- Developed CloudFormation templates that works as backup and recovery process which automatically creates multiple Lambda functions and those functions will be triggered by object creation in the S3 bucket.
- Used AWS Athena and Glue for querying and analyzing data in Amazon S3 using standard SQL.
- Responsible for building/deploying Java, Oracle ADF to various environments using Jenkins and Maven.
- Worked as AWS IAM admin and created different types of custom roles and policies to the team members to maintain the accesses to different AWS services.

- Created an end to end Jenkins pipeline to absorb code from GitHub, to resolve dependencies from Artifactory and deploy using UDeploy.
- Configure dashboards in Grafana and Kibana to monitor and alert based on the application custom conditions.
- Developed automation scripts in YAML using Ansible to deploy and manage Java applications across Linux servers.
- Writing/Debugging Dockerfiles to build application Docker images & deploying them to Kubernetes by writing YAML files and by using kubectl CLI.
- Used Kubernetes to orchestrate the deployment, scaling, and management of Docker Containers.

PROJECT 4 :

Employer	:	Oracle Corporation (Full Time)	Hyderbad, India
Role	:	Senior Software Engineer	
Duration	:	January 2014 - June 2016	

ROLES AND RESPONSIBILITIES

- Migrated SVN repositories into GIT using SubGIT and maintenance of source code in GIT, branching, creating labels, and merging of codes on GIT for QA testing and release.
- Provision the infrastructure for the applications with the templates in different AWS accounts to add application stack dependencies using CFT and Terraform.
- Involved in designing and documenting the deployment and migration process.
- Used Atlassain products like JIRA, Confluence for issue tracking, documentation and code integration.
- Configured S3 buckets with various life cycle policies to archive the infrequently accessed data to storage classes based on requirement.
- Created snapshots to take backups of the volumes and also images to store launch configurations of the EC2 instances.
- Created and maintained Chef recipes and cookbooks to simplify and expedite deployment of applications and mitigate user error.
- Involved in pulling images from docker hub, running containers based on an image, creating Docker file to manage customized containers, exposing a container with port redirect, container volume management, docker inspect, docker commit to capture the file changes/settings into a new image and pushing the image to docker hub.
- Containerize the legacy applications(Java, PHP, Node.JS) and deploy them on Amazon EKS and ECS clusters. Deploy EKS clusters in test and production environments.
- Involved in Analysis, Design, and Development of Automation Dashboard Reports.
- Assigning work to the team and tracking their progress.
- Developed entire Dashboard in OBIEE (Oracle Business Intelligence Enterprise Edition).
- Job scheduling of the reports and responsible to make sure that the application is always up and running.
- Resolving issues in application reported by the entire team.
- Created Tables, Charts and Reports using Oracle BI Publisher.

PROJECT 5 :

Client	:	Oracle Corporation	Hyderabad, India
Employer	:	Varsun eTechnologies (Full Time)	
Role	:	Software Engineer	
Duration	:	May 2011 - January 2014	

ROLES AND RESPONSIBILITIES

- Involved in analysis, specification, design, implementation and testing phases of Software Development Life Cycle.
- Provided end-user training for all Subversion (SVN) users to effectively use the tool
- Creation of AWS account, creating users, and allocation of user policy to individual user.
- Created custom IAM policies, roles to give more granular level access based on the application team's requirement.

- Automating day to day tasks through Shell or Python scripting.
- Creating S3 Buckets and restricting access on buckets and directories to specific IAM users.
- Used AWS S3 to create buckets and integrate with other AWS services like EC2, Route53 and host static content..
- Provision and configure VPCs, NAT Instances, NACLs and launch public and private instances in different subnets.
- Creating/Managing DNS records on Amazon Route 53.
- Creating/Managing AMI/Snapshots/Volumes, Upgrade/downgrade AWS resources (CPU, Memory, EBS)
- Deployment of entire infrastructure using cloud formation.
- Coordinating with developers, Business Analysts and Managers to make sure that code is deployed in the production environment.