

Sai Prakash Avula

saiprakash.avula@gmail.com | (408)627-9386 | Seattle, WA 98011

<https://www.linkedin.com/in/sai-prakash-avula>

<https://github.com/Prakash171>

Objective:

Leverage 13+ years of experience across cloud and enterprise technologies to drive innovative solutions, mentor teams and contribute to large-scale cloud transformations that deliver strategic value and operational excellence.

Certifications:

- **Certified Kubernetes Administrator (CKA)**
- **HashiCorp Certified:** Terraform Associate
- **Certified SAFe 4 Practitioner** (Scaled Agile Framework)
- **AWS Certified Solutions Architect** – Professional
- **AWS Certified AI Practitioner** - Foundational
- **AWS Certified Security** – Specialty
- **AWS Certified Developer** – Associate
- **AWS Well Architected** – Proficient

Work History:

Delivery Architect

Sep 2020 – Present

AWS (Amazon Web Services) – Seattle, WA – USA

- **Driving AWS Adoption:** Advocate for AWS technologies, guiding customers to effectively leverage AWS services to meet strategic goals.
- **Modernization & Migration:** Led modernization and migration initiatives, resulting in a 30% faster transition from on-premises to AWS cloud environments.
- **Scalability & Security by Design:** Architect scalable, secure applications with best-practice security aligned to AWS standards.
- **Infrastructure as Code & Automation:** Enabled customers to adopt Infrastructure as Code using Terraform, CloudFormation and CDK. Built re-usable modules with Terraform, accelerating deployment by 30% and supported processes to streamline and automate access controls to eliminate manual approval bottlenecks. Example: providing dev teams with reusable, secure templates/modules to self-deploy roles and policies on demand with inbuilt permissive guardrails for security.
- **Containerization & Integration:** Assisted customers in migrating/optimizing containerizing workloads from On-prem k8s, OpenShift to EKS, ECS allowing them to seamlessly integrate with existing CI/CD pipelines and security tooling.
- **Cross-Industry Expertise:** Supported Customers with AWS solutions across diverse industries like Software, financial services, insurance, healthcare, and hospitality.

- **Building Customer Trust:** Foster strong customer relationships by delivering high-quality, technically excellent solutions tailored to client needs.
- **Cross-Team Collaboration:** Collaborate with Customer - Platform Engineering, Cloud Center of Excellence, DevOps and Dev teams to streamline processes and deliver reusable infrastructure modules.
- **Frontline Customer Advocacy & Feedback Loop:** Act as a customer advocate by working closely with AWS internal teams to relay customer feature requests (PFRs), influence product development, and provide interim workarounds to unblock customers.
- **Sales and PoC Support:** Support AWS sales teams by creating proofs of concept and deploying sample applications to showcase AWS capabilities.
- **AWS Certified containers SME** (Subject matter expert): AWS Cloud tools set experience with – EKS, ECS, ECR, App Mesh etc.
- **Customer-facing skills:** represent AWS within customers' environments and drive discussions with senior stakeholders.
- **Troubleshooting Skills:** Worked troubleshooting/resolving critical, complex customer issues that span across multiple Account/services/on-prem tools etc.
- **Detailed Technical Documentation:** Create comprehensive, step-by-step documentation that provides customers with clear, actionable instructions and technical details for implementing and maintaining the solutions I deliver.

Cloud Engineer Lead

Nov 2019 – Sep 2020

Mutual of Omaha - Omaha, NE – USA

- Enterprise Cloud Team, build and maintained infrastructure in AWS cloud – **Landing zone, Account Vending, Service Catalogs, API Gateway, Lambda, VPC, IAM, EC2, EKS, ECS, Fargate, security and monitoring** Enterprise level deployments.
- Managed AWS **SSO, Organization** and **Permission Sets** for user and member accounts management.
- Configured **Shared Services** account with **Transit Gateway** through which all **member accounts** traffic is centralized and monitored via **VPC flowlogs, Cloudwatch, Cloudtrail logs** stored in **S3 buckets**.
- Implement account level **Service Control Policies** and **Config** rules to control/alert and secure Infrastructure.
- Build **Bamboo CI/CD pipelines** for cloud based deployments.
- Infrastructure as code experience using – CloudFormation, CDK, Terraform
- Worked intensively to develop Infrastructure as code - **CDK (cloud development kit)** constructs using **TypeScript** and compiled source modules using **jsii** to package it as modules in targeted languages like – **java, python, dotnet**.
- Written unit **Test** modules using **jest** framework and incorporated to **CI/CD pipeline** to deploy services in cloud.
- Using **Salt** configuration management tool automated deployment of packages to fleet of Instances.
- Published CDK constructs to **Jfrog Artifactory** allowing development teams to build infrastructure and Apps enforcing **Security/Monitoring/Resilience** NFR's (**Non-functional requirements**) by default.
- Designed and implemented secure **IAM** access to **RDS** instances in private network via **Bastion** hosts using **ssh key's** which are stored in **Secrets Manager** and **rotated** using custom **Lambda** function.
- Written technical **documentation** across **SharePoint** sites and **Confluences** pages.

DevOps Engineer

Dec 2017 – Oct 2019

Symantec Corporation - Mountain View, CA – USA

- Build/Configured/improve secured environments using AWS tools: **Networking** - VPC's, public/private - subnets, VPC peering, Route 53, NAT-Gateway, ACL's & SG's, IAM - roles, policies, **Instances** - EC2, ECS, WorkSpaces, **Storage** - S3, EFS **RDS** - PostgreSQL
- Configured and maintained fully automated **CI/CD** pipeline
- Supported Development Teams by building/configuring/maintaining Atlassian tools - **JIRA**(project panning), **Confluence**(Document Share), **Bitbucket**(source code repository), **Bamboo/Jenkins**(CI/CD)
- IAC (infrastructure as code) using **Terraform/CloudFormation** templates to spin – AWS services stacks
- Interacted with project managers to take inputs, design and build JIRA **workflows**
- Implementing **Jfrog Artifactory** to enable product Team's securely access - Remote(Centos, Debian, Python, Docker, Go, Maven, Helm ...), Local(private) repositories
- Worked on container services like - Docker creating/deploying standard base docker image using Dockerfile, writing docker prune scripts to clear unused - images/volumes/container
- Using Configuration Management tool "**Salt Stack**" - created event driven Infrastructure to trigger jobs based on event's configured using Salt Reactor system.
- Installed and configured **SFTP servers** to centralize and monitor data transferring in/out of secure environment.
- Actively monitored cloud Infrastructure with - **CloudWatch** alerts, **Dome9** for security groups, **Zabbix** for instance level monitoring.
- Configured **CryptoAuditor** server to monitor - **ssh, sftp/scp, http/https** traffic and also to restrict sftp get while allowing sftp put operation.
- Installed **NoMachine** server to enable user connect to EC2 instance **GUI**
- Scripting using - Bash and python to automate
 - **Usage reports** based on - CPU, Memory and Disk
 - Taking **backups** of files/folders based on cron jobs
 - **Rotating logs** based on file size and backing up as tar files
 - To check **Application services** - status, update and restart
- Written user **documentation** in Confluence to easily follow and make use of build/available resources

DevOps Engineer – Intern

Feb 2017 – Oct 2017

InfoSphere Technologies Inc. – Roseville, CA – USA

- Creating repositories, branches, tags in GIT and assist the developers to fix merging issues.
- Installed and configured Jenkins with required plug-in (mavin, git).
- Setting up commit builds in Jenkins to check for compilation failures of checked-in source code by the developers to accelerate CI.
- Used Docker for running and managing container, pull/push images from Docker Hub, using Docker Compose file to define and run services on multiple containers.
- Deployed EC2 instances, Created S3 buckets and used Autoscaling to scale up and scale down auto deploying of EC2 instances based on CloudWatch utilization metrics.
- Worked on VPC - configuring private, public subnets, Internet Gateway, Security groups and Access Control Lists for secure deployment of servers over AWS cloud.

- Supporting migration of applications to AWS Cloud using AWS – Server Migration Service using SMS connector to replicate virtual servers to S3 buckets and converting them to AMI to run EC2 instances.
- Writing CloudFormation Templates to spin resources on AWS cloud.
- Working experience with Atlassian products like Jira – for project planning (scrums/kanban), Confluence – for document Sharing, Bitbucket – source code repository.
- Used python scripts to extract data and store in required output files, to remove duplicates, creating basic scripts using python boto3 and paramiko for establishing connection to EC2 instances and executing commands.
- Have knowledge on Azure cloud and office365 cloud services as well.
- Database installation, configuration and administration – SQL , MySQL
- Worked in Windows/Linux – CentOS, Redhat, Ubuntu environments.
- Created Snapshots, Backups of data.

Systems Engineer

Jan 2015 – Sep 2015

Deloitte – Hyderabad, INDIA

- Supported Deloitte Online, Deloitte People Network, Deloitte Digital applications.
- Focused on automation, CI/CD pipeline – Jenkins, AWS, eRoom, SharePoint, Windows/Linux (CentOS, Redhat) Server Administration.
- Written automation scripts in bash.
- Running web scale services on AWS – EC2, S3 & Security and management using IAM and Cloudwatch.
- Supported the teams in building team sites, Document center sites, triggers, workflows and alerts.
- Security tools experience include Nessus, wire shark, nmap & Symantec critical protection system (IDS, IPS).

Systems Administrator

Aug 2013 – Oct 2014

Invilogic Software – Hyderabad, INDIA

- Linux – Centos, RedHat, Ubuntu distributions and WAR deployment, Apache Tomcat experience.
- Deploying and maintaining - AD, DNS, DHCP, WDS, IIS servers (Windows 2008, 2012 R2), SQL 2008, ISA, Solidworks PDM, PTC Creo, Mathcad.
- Main contribution was working in setting a PDM (Product Data Management) server for SOLIDWORKS to synchronize designed updated to the client server in UK.
- Cloning, backups of virtual machine's, Snapshots -VMware ESXi, Solidworks PDM server

Junior Systems Administrator Jan 2012 – Aug 2013

Ektha Solutions – Hyderabad, INDIA

- Supported google maps GIS modeling & Savoya.com projects.
- Deployed and supported server/client machines in WINDOWS environment.
- Troubleshooting problem relating - SketchUp and Building Maker tools, configuring VOIP phones & PBX.

Skills:

Cloud tools: AWS(EKS, ECS, ELB, S3, EC2, RDS, IAM, VPC, Route 53, NAT-Gateway, ACL, SG, CloudWatch ...)

Container Services: Docker

CI/CD: Jenkins, Harness, Bamboo

Configuration Management: Salt Stack, Ansible

Scripting: Bash, Python

IaC: Terraform, CloudFormation, CDK(Cloud Development Kit)

SCM: Bitbucket, Github, Gitlab

OS: Linux- Centos/Ubuntu, Amazon Linux

Databases: PostgreSQL, SQL, DynamoDB

Monitoring: CloudWatch, Dome9, Zabbix, CryptoAuditor

Repository Manager: Jfrog, ECR

Hypervisor: VMware ESXi, Hyper-V, Virtual Box

Other tools: JIRA, Confluence, SharePoint, Office 365

Education:

Master of Science – MIS, 2017

Master of Technology – CSE, 2015

National University – San Diego, CA, USA (3.4 GPA)

JNTU – Hyderabad, INDIA (76.3%)