**Venkata Yella**

**Sr. Cloud Architect**

**PROFESSIONAL SUMMARY:**

* Experienced consultant experienced in planning, developing, & delivering enterprise/cloud-based software solutions.
* AWS Certified Solutions Architect Professional and Certified DevOps Engineer, effectively collaborating, facilitating, leading, and coaching agile team.
* Used Terraform, CDK, CFT, Ansible & Puppet for Config. Management, Infrastructure as a Code (IaaC).
* Expertise in building AWS EKS Node Group and EKS Fargate cluster creation using Terraform, Building Terraform modules as reusable components for AWS services, writing examples for Terraform modules for building AWS services, Deploying the terraform code in the Terraform cloud, Expertise in using Terraform functions, Troubleshooting and fixing the Terraform source code issues.
* Implementation expert of AWS continuous integration/continuous pipeline delivery (CI/CD).
* Built CI/CD pipelines using Jenkins, GIT, Maven, Sonar, Ansible to automate & deploy.
* Experience in Kubernetes and Rancher to deploy, scale, load balance and manage container orchestration with multiple namespace versions and life cycle management of Kubernetes Clusters.
* Experience with testing tools JUnit, Mockito, Load Runner, Jasmine, and Selenium.
* Extensive experience in TCP/IP, DHCP, AAA, DNS, RBAC, Expertise in coordinating architectural/design discussions and driving creative solutions that are highly scalable.
* Expertise in architecting and administration of self-healing & secure cloud-based services and applications for PaaS, IaaS & SaaS environments using AWS services such as IAM, VPC, EC2, ECS, EBS, RDS, EKS, S3, Lambda, ELB, Auto Scaling, Route 53, Cloud Front, Cloud Watch, SQS, SNS.
* Extensively worked on PySpark, Sqoop, Hadoop, Hive, Spark, Cassandra to build ETL and Data Processing systems having various data sources, data targets and data formats and expertise in optimizing Map Reduce algorithms using Mappers, Reducers, combiners to deliver best results for large datasets.
* Experience in building ETL scripts in different languages like PLSQL, Informatica PS/PE, Hive, Pig and Spark and expertise in Creating, Debugging, Scheduling and Monitoring jobs using Airflow and Oozie.
* Experience in building enterprise and distributed applications by using technologies REST Web Services, APIGEE, SOAP, Micro Services, Camel, JMS, Active MQ, EJB, Spark, Kafka, MongoDB and Cassandra.
* Experience in domain driven design, pub-sub architecture, single responsibility principal patterns.
* Experience in developing applications with databases RDS, Oracle, MySQL, PostgreSQL, SQL Server.

**SKILLS/TOOLS:**

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| **Cloud Platforms** | AWS, RedHat OpenShift, Microsoft Azure, GCP, Rackspace |
| **Hybrid Cloud Environments** | AWS Elastic Beanstalk, EBS, ELB, EKS, DynamoDB, Redshift, IAM, Vault, S3, Elastic Cache, Lambda, Glue, CFT, Code Build/Deploy, Cloud Front, Azure Data Lake, GCP |
| **Lang./Scripting** | Python, PySpark, Java, TypeScript, ReactJS, Angular, Node, Groovy, YAML, Shell, Perl |
| **Config. Mgmt.** | Ansible, Puppet, Chef, Jenkins, TeamCity, GitLab, Maven, Octopus Deploy, Gradle |
| **Technologies** | APIGEE, Apache Spark, Kafka, Tomcat, Nginx, WebLogic, WebSphere, snapLogic, JBOSS |
| **Databases** | RDS, DynamoDB, Mongo DB, NoSQL, Microsoft SQL Server, Oracle, DB2, MySQL |
| **Containerization** | Terraform, CDK, CFT, ECS, Kubernetes, Rancher, Docker Swarm |
| **Monitoring** | Data Dog, Nagios, Splunk, Loggly, Dynatrace, Elasticsearch, Logstash, Kibana |
| **DevSecOps** | SonarQube, Snyk, Nessus Tenable, GitLab, Veracode, Twistlock, Blackduck, Fortify |
| **Testing Tools** | Jasmine, JUnit, Selenium, Postman, SoapUI, Mockito |

**Professional Experience:**

**CMS, Baltimore MD Sr. Cloud Architect October 2021 – Current**

**Project: Cloud Services**

**Responsibilities:**

* Experience of designing and delivering distributed cloud solutions using AWS Fed Ramp.
* Hands-on experience with AWS PaaS and SaaS solution development technologies including Serverless/Lambda.
* Developed AWS Services Environment, API Management platform technologies, scalable performant services.
* Experience with Identity Management and Security technologies including custom SAML 2.0 providers, Authentication, Secure Data, Data Encryption, Extensive experience in TCP/IP, DHCP, AAA, DNS, RBAC.
* Developed Terraform modules, add-ons, helm charts. Worked with tfworkspace, HashiCorp Vault (external secrets).
* Worked with continuous Operational and Monitoring tools.
* Developed an Automation Service with Spring Boot, Data, Security, Cloud Config Server, Oracle, Kafka and EhCache.
* Developed Config Service Interface Micro service to transfer JSON data from Mongo.
* Developed Micro services/APIs in Java and Python for data extraction purposes.
* Designed, Developed API Proxies using APIGEE Edge from existing REST Services, Setup APIGEE API Management Life Cycle.
* Setup pushing API’s (YAML), Created custom policies by gateway scripts for rules, configuring message assemblies.
* Created and configured micro service architecture and integrated with AngularJS application. Created continuous delivery pipeline to run the war and deploy jobs in Jenkins’s brew master instance (CI server), which reduced the time for the deployment of micro services. Each module of the application was developed, tweaked, and redeployed independently. Different modules of the application were built with different technologies as to improve performance. Each module usually manages its unique data, so decentralized data management was done easily.
* Developed new libraries with Micro Services architecture using Rest APIs, transformed legacy application into a suite of cloud-hosted Micro services, and laid the groundwork for traffic scale.
* API & Web services testing tools: APIGEE, SOAPUI, Postman, Advanced REST Client.
* Exclusively worked on Control M (Scheduling tool) to create Informatica jobs scheduled as demanded.

**Environment:** RHEL, AWS CDK, CFT, Terraform, Hashi Corp Vault, VPC, ELB, RDS, Route 53, EMR, Dynamo DB, Athena, Lambda, Redshift, Glue, IICS, APIGEE, Kafka, TypeScript, React, Python, PySpark, Java, Atlassian JIRA, Confluence, Bitbucket, Chef, SourceTree, PowerShell, Apache/Jetty/Ngnix, Oracle Integration Tools XStore, IBM WebSphere Commerce/Admin, Maven, Rundeck, Cucumber Peregrine, Crucible, Dynatrace, Containerization using Docker, Nessus, Snyk, Kubernetes, Rancher.

**GSA, Washington DC, Sr. Cloud Architect Mar 2020 – Oct 2021**

**Project: Fed Ramp Cloud Solutions**

**Responsibilities:**

* Implemented Integration best practices, design principles and approaches for a range of application styles and technologies to help guide and steer decisions.
* Experience working in a Dev/Ops environment with CI/CD via AWS DevOps Services
* Understands and optimizes AWS subscriptions for efficient cost management.
* Experience with Python, JavaScript/Typescript, and/ or shell scripting
* Demonstrated experience managing live software solutions for enterprise customers.
* Knowledge of Scrum Agile methodologies, Strong troubleshooting and critical thinking skills, Experience of working in highly dynamic teams using agile methodologies, Ability to prioritize and multitask.
* Designed and developed a REST-full style Web Services layer and an AJAX front end.
* Designed and built a user discussion portlet to work inside Orchard Portal. Exposed the interface through a push to Blackberry users. Used Forum and plain XML web services. Built UI with MVC, CSS3, Dojo and custom JavaScript.
* Through APIGEE, created environments, virtual hosts, API proxies, Cache, Products and publishing it to the portal.
* Designed and built document tracking/workflow system with jQuery, JSON, and a REST architecture.
* Contributed to development of Enterprise Application Integration (EAI) software and used it to convert proprietary data formats to and from standard XML formats. Involved working with Oracle databases. Exposed various capabilities as Web Services using SOAP/WSDL.
* Developed thin-client Customer Relation Management (CRM) system in MVC Framework.

**Environment**: RHEL, Python, APIGEE, TypeScript, React, AWS, Redshift, Glue, Atlassian JIRA, Confluence, Bitbucket, SourceTree, PySpark, Java, ReactJS, RHEL Linux, PowerShell, IBM WebSphere Commerce/Admin, Maven, Rundeck, Dynatrace, Containerization using Docker, Kubernetes, Rancher.

**FAA, Washington, DC, Sr. Programmer October 2014 – March 2020**

**Project: ERAM and TFDM, FAA**

**Responsibilities:**

* Setup Data warehouse, HADOOP with Apache Spark and Spark Streaming using PySpark, HBase, KAFKA.
* Data modeling and database design, Data warehousing and Business Intelligence systems and tools
* Administration, configuration, monitoring, and performance tuning of Hadoop/Distributed platforms
* Develop guidelines, standards, and processes to ensure the highest data quality and integrity.
* Developed over 40 Micro services/APIs in Java and Python for data extraction purposes.
* Proficient in AWS services like VPC, EC2, S3, ELB, Auto Scaling Groups (ASG), EBS, RDS, IAM, Cloud Formation, Route 53, CloudWatch, CloudFront, CloudTrail.
* Wrote Ansible Playbooks with Python SSH as the Wrapper to Manage Configurations of AWS nodes and Tested Playbooks on AWS instances using Python.
* Implemented Amazon Kinesis, AWS Lambda NodeJS, Amazon Simple Queue Service (SQS), Amazon Simple Notification Service (SNS), and Amazon Simple Workflow Service (SWF).
* Implemented Web Services, API Gateways, Application integration development and design.
* Splunk infrastructure with high available capacity planning and optimization configuration, Splunk forwarder deployment, scripted to automate various aspects of operational tasks.
* Documented functions and changes to new or modified features/modules, test activities/results.
* Enhanced and monitored operation, performance, & security monitoring (including logging). Identified new tools, processes, and trained to improve team efficiency.
* Performed data migration from on premises env. into AWS.
* Designed, implemented, and maintained all AWS infrastructure and services within a managed service.
* Designed and Developed API proxies using APIGEE Edge from existing SOAP and REST services.
* Enhanced and monitored operation, performance, & security monitoring (including logging). Identified new tools, processes, and trained to improve team efficiency.

**Environment:**RHEL Linux, IBM WebSphere Commerce/Admin, Perl, Python, Java, Node.js, AngularJS, ReactJS, APIGEE, Splunk, Solr, Shell, Hadoop (HDFS, MapReduce, Hive, HBase, Pig, Spark), Cloudera, NoSQL (MongoDB), JUnit, Git, Enterprise scheduler, Kafka, Flume, Storm, Appliances (Netezza), Data Virtualization, D3, AWS Cloud Formation, VPC, ELB, RDS, Route 53, EMR, Dynamo DB, Athena, Lambda, Kibana, Tableau, Integration on AWS, OSGI, JSP, TIBCO.

**Skai Hub, Lead Developer Dec 2013 – Oct 2014**

**Project: Big Data Analytics**

**Responsibilities:**

* Installed and configured Cloudera distribution with Hadoop on the CloudEC2 Cluster (AWS).
* Configured Oracle database to store Hive metadata, Loaded unstructured data into Hadoop File System (HDFS).
* Created ETL jobs to load JSON data and server data into Hadoop.
* Created reports and dashboards using structured and unstructured data.

**Environment*:*** Amazon AWS, Cloudera, Hadoop2, HDFS, YARN, Map-Reduce, Hive, Impala, Pig, Spark, Zookeeper.

**FAA, Sr. Consultant August 1999 – December 2013**

**Project: FAA’s En-Route Info Display Sys (ERIDS)**

**Responsibilities:**

* Designed and developed a REST-full style Web Services layer and an AJAX front end.
* Designed and built a user discussion portlet to work inside Orchard Portal. Exposed the interface through a push to Blackberry users. Used Forum and plain XML web services, MVC, CSS, Dojo, and custom JavaScript.
* Designed and built document tracking/workflow system with HTML, CSS and JavaScript, jQuery, JSON, REST.
* Contributed to development of Enterprise Application Integration (EAI) software and used it to convert proprietary data formats to and from standard XML formats. Involved working with Oracle databases. Exposed various capabilities as Web Services using SOAP/WSDL.
* Developed thin-client Customer Relation Management (CRM) system in MVC Framework.

**Environment*:*** UNIX/Windows Servers, Oracle, Java, Rational Clear Case, Clear Quest, PERL, Verity Search Engine, AJAX, Lucene/Solr, NETAPP.

**Clearances:**

* Federal Government Security Clearance SF-86**.**

**Education:**

* Master’s in computer science (MS), 1998, Bharathidasan University, India**.**

**Professional Certificates:**

* AWS Certified Solutions Architect Associate (SAA-C02), Amazon AWS Training and Certifications (2020).