**Triveni Kontham**

**Broadlands, VA**

**Sr. AWS DevOps Engineer/Cloud Engineer**

[**trivenisridhar1976@gmail.com**](mailto:trivenisridhar1976@gmail.com)

**(571) 599-5859**

[**https://www.linkedin.com/in/trivenikontham/**](https://www.linkedin.com/in/trivenikontham/)

**Professional Summary**

* An Excellent, self-motivated professional with more than 11+ years of experience in IT industry with major focus on DevOps, AWS, EC2, RDS, security groups, auto-scaling, load balancers (ELBs), Software Configuration and Build/Release Management, Maven, Chef, Jenkins, Ansible, Terraform, Terragrunt, Docker, Packer, Kubernetes, Helm, Splunk, Ant, GIT, etc.
* Experienced in AWS infrastructure planning, deployment and support.
* Experienced in establishing the enterprise infrastructure on Amazon Web Services (AWS).
* Worked on AWS services like EC2, SNS, SQS, ELB, S3, ECS, EKS, ELB, Elastic IP's, Load balancers, Auto-scaling groups, elastic beanstalk, Direct Connect, VPC, End Points, Cloud watch, IAM, Security Groups, and several other services.
* Designed secure networking infrastructure using VPC, Subnets, Route Tables, Internet Gateways, NACLs, and Security Groups, enabling isolated and compliant cloud environments.
* Experience working with IAM to create new roles and groups with customized policies.
* Hands-on experience in using Different triggers and configured different AWS messaging services such as SNS, SQS, SES, Pinpoint, and database services such as Amazon Aurora, RDS, DynamoDB, and Redshift
* Experience in Monitoring resources such as EC2, EBS volumes and Amazon RDS services using CloudWatch.
* Experienced in managing AWS Route53 to route traffic between different regions set alarms and notifications for EC2 instances using Cloud Watch.
* Experience in configuring AWS S3 with lifecycle policies to backup files and archive files in Amazon Glacier.
* Experience in Developing AWS CloudFormation templates to create custom sized VPC, subnets, EC2 instances, ELB and security groups.
* Experienced in automated deployment (Terraform, AWS CloudFormation), and serverless architecture AWS lambda and other AWS services.
* Used Kinesis and Kinesis firehose for real time data streaming
* Knowledgeable in data pipelines and AI observability practices, with a focus on enabling reproducible, secure, and scalable ML/AI environments in DevOps workflows..
* Integrated Amazon Connect with AWS Lambda and Amazon DynamoDB for real-time data-driven routing decisions
* Enabled call recording, analytics, and transcription using AWS services like Amazon Kinesis
* Provisioned large-scale environments as an infrastructure as a code using Terraform and developed custom Terraform Modules for projects to manage code as DRY
* Provisioned the highly available EC2 Instances using Terraform and Ansible Playbooks.
* Experience in setting up building and deployment automation for Terraform scripts using Jenkins.
* Experience in production environment using Terraform with Terragrunt as a wrapper.
* Used Packer to create Automated Machine Images and automated the whole AMI creation process using Jenkins
* Building Docker images with docker files and provisioning with Kubernetes.
* Expert on infrastructure with Docker containerization and Configured Docker containers and created Dockerfiles for various environments.
* Involved in Kubernetes Cluster Deployments using Kops and Helm.
* Designed project workflow/pipelines using CICD tools like Jenkins, Spinnaker and also managed different plugins inside Jenkins like Maven, AWS CLI, Docker and Kubernetes.
* used Spinnaker for Application Management and Application Deployment, targeted towards cloud services.
* Built Jenkins jobs to create AWS infrastructure from GitHub repos containing terraform code
* Integrated SonarQube with Jenkins using periodic builds to test code quality and used Kubernetes plugin to deploy this application into a Kubernetes Cluster.
* Extensively worked on Jenkins and Spinnaker for continuous integration and for End-to-End automation for all build and deployments.
* Experienced in Ansible Tower, creating Ansible playbooks for managing GIThub configuration application/OS files, integrating with Jenkins, and verifying with Jenkins plugins, deploying the application in a Linux environment.
* Worked on Setting up and maintaining an automated environment using Chef recipes & cookbooks within the AWS environment.
* Used Ansible to Setup/teardown of ELK stack (Elasticsearch, Logstash, Kibana) and troubleshoot the build issues with ELK and work towards the solution.
* Hands-on Experience in configuring ELK Beats (MetricBeat, PacketBeat, WinlogBeat and Filebeat), to collect Application Performance related data.
* Experienced in working with IT infrastructure monitoring tools like NagiOS, CloudWatch, Zabbix, Datadog and Splunk, Pingdom, Logstash.
* Assisted in troubleshooting network access issues, validating firewall rules and connectivity paths for production applications.
* used New Relic for monitoring resources, application performance and to detect the problem areas.
* experience in ZooKeeper to track the status of nodes in the Kafka cluster
* and maintain a list of Kafka topics and messages.
* Experience using monitoring tools like Nagios and Datadog to determine performance metrics as well as event monitoring for infrastructure and cloud services.
* Applied SRE principles to improve reliability and maintainability by integrating automated recovery scripts, scaling events, and failure detection mechanisms.
* Pingdom is used to provide automated website status checking if the website is online and available
* Used different Bug Tracking Tools like Remedy, Jira, ServiceNow and Clear Quest.
* Automated build and deployment process in various enterprise environments by writing automation scripts using Python, Ruby, Perl, Shell, C-shell, Bash, YAML,Go.
* Experienced in Branching, Merging, Tagging and maintaining the version across the environments using SCM tools like GIT, GitLab, GitHub and Bitbucket
* used JFrog Artifactory to manage and automates artifacts and binaries during the application delivery.
* Network Protocols/Services: LDAP, TCP/IP, UDP, FTP, SFTP, HTTP/HTTPS, SSL, DNS, and DHCP.
* Experienced with Databases Like Oracle, SQL Server, MySQL, NoSQL (DynamoDB, Couchbase), Amazon Aurora.
* Responsible for automated deployment of Java applications in Tomcat Server.
* Monitored and optimized network traffic and routing for high-availability applications, ensuring minimal downtime and compliance with AWS security guardrails.
* Supported Direct Connect and VPN configurations for hybrid cloud environments, ensuring low-latency and secure connectivity between on-prem and AWS workloads.
* Enabled secure external application access through fine-grained WAF and security group configurations,validating behavior through URL testing and response validation.
* Having work experience in support of multi-platforms like UNIX, IOS, Linux and Windows of production, test and development server.
* managed user roles, groups, and permissions, ensuring only authorized access and aligning with internal security policies.
* Currently leading a Proof of Concept (PoC) to evaluate the integration of AI/ML models into DevOps workflows for predictive insights, intelligent automation, and anomaly detection.
* Working with Amazon SageMaker to prototype ML models that predict build/test failures and deployment risks based on historical CI/CD pipeline data.

**Education**

* Bachelor of Science 1999 – 2002 (Dr VS Krishna College, AP, India
* Masters in Mathematics 2002 – 2004 (Andhra University, AP, India)

**Certifications**

* AWS Certified Solutions Architect Associate.
* Generative AI fundamentals
* Certified Splunk power user.

**Technical Skills**

* **Operating Platforms:** Unix, Linux, Windows, MAC.
* **Cloud Platform:** AWS, Azure, GCP
* **AWS services :** AWS (VPC, VPC Endpoints, EC2, Security Groups, Transit Gateways, RDS, AWS Glue, ELB, ECS, EKS, Lambda, S3, AWS CLI, IAM, CloudWatch, CloudTrail, Cloud Formation Templates, Elastic IP's, Auto-scaling, Route 53, Amazon connect, amazon lex, DynamoDB, DynamoDB Streams, SQS, REDSHIFT, SNS, Kinesis, Kinesis Firehose, Kinesis Stream), OpenStack (Nova, Swift, Glance), Cloud Foundry, AWS ElastiCache, AWS Redshift, Trusted Advisor, SQS, Storage Gateway, Amazon Linux AMI, Red Hat Linux Enterprise.
* **Configuration Management Tools:** Chef, Puppet, Vagrant, Maven, Ansible, Consul, SaltStack
* **Infrastructure as Code:** Terraform, Terragrunt, CFT.
* **CI/CD Tools:** Jenkins, Jenkins X, ANT, Maven, Bamboo, Spinnaker, GitLab, Travis CI, Circle CI, Team City, Drone, Concourse.
* **Build Tools :**Maven, Ant, Gradle, AWS Code Build, Jenkins Pipelines, GitLab CI/CD
* **Version control Too**l: Git, CVS.
* **Log Management Tools:** Elastic Search, Kibana, Grafana, Logstash, Splunk, Datadog
* **Databases:** MySQL, Oracle, NoSQL (Cosmos DB, DynamoDB, MongoDB, Cassandra)
* **Containerization**: Docker, Kubernetes, Amazon ECS, Helm, Mini-kube.
* **Source Code Management**: GitLab, GitHub, Azure Repo, Bit Bucket
* **Monitoring Tools**: Prometheus, Splunk, Dynatrace, Grafana, Logstash, Elastic Search, Kibana, Kafka, DataDog, App Dynamics.
* **Scripting/Programming Tools**: Bash Shell, Python, YAML, JSON, Ruby.
* **Bug Tracking Tools**: JIRA, Service Now
* **Application Servers**: Web Logic Application Server 9.x, 10.x, Apache Tomcat 2.0.x, JBOSS 4.x/5.x, Red Hat, WebSphere 6.x/7.x/8.x
* **Web Servers:** Apache HTTP 3.x, Nginx, Apache TOMCAT
* **Repository Management:** JFrog, Nexus, Artifactory
* **Operating Systems**: RedHat Linux, UBUNTU, CentOS, UNIX, WINDOWS.
* **Virtualization:** VMware Client, Windows Hyper-V, vSphere 5.x, Data Center Virtualization, Virtual Box, Power VM.
* **Programming Languages:** C, SQL, HTML, PHP, XML, Bash, Perl and Shell Programming, JSP, Python and Ruby.

**Professional Experience**

**FANNIMAE, RESTON, VA April 2023 – Present**

**Sr AWS/DevOps Engineer**

### Project-1:

### Real User Monitoring (RUM) & OpenTelemetry-Based Observability:

* I designed a serverless monitoring pipeline using CloudFront, Lambda, and S3 to deliver RUM scripts and dynamically update configurations via GitLab CI/CD.
* Implemented end-to-end observability using OpenTelemetry for Java and Python applications.
* Migrated CI/CD pipelines and repositories from Bitbucket to GitLab, preserving project structure, commit history, and access controls; integrated GitLab with AWS services for seamless cloud-native DevOps workflows.
* Administered GitLab CI/CD pipelines to support application deployments and infrastructure changes, leveraging reusable pipeline templates and managing GitLab Runners across AWS EC2 instances.
* Automated RUM configuration updates using GitLab CI/CD, reducing manual intervention by 70% and ensuring consistent deployments
* Deployed end-to-end infrastructure for Real User Monitoring (RUM) using Terraform ensuring consistent and repeatable deployments across multiple AWS environments.
* Reduced incident response time by 40% by integrating logs and RUM data with Splunk, and Dynatrace dashboards.
* Used Terraform modules to provision S3 (for script storage), CloudFront (for delivery), Lambda (for automation), Secrets Manager (for token management), IAM roles, and Route 53 for failover routing.  
  Enabled infrastructure-as-code (IaC) driven deployment pipelines through GitLab CI/CD, reducing manual provisioning time by 60% and minimizing configuration drift.
* Implemented Real User Monitoring (RUM) instrumentation on Node.js and Java-based backend services to capture user-centric performance metrics like page load time, API response time, and user interactions.
* Integrated RUM tools (e.g., OpenTelemetry, Datadog, New Relic, or Dynatrace) into Spring Boot applications to track application performance from the end-user perspective and identify latency issues.
* Conducted RUM solutions to evaluate metrics capture efficiency, end-to-end tracing capabilities, and integration feasibility across JavaScript (React), Node.js, and Java-based microservices.  
  Integrated Apigee with DevOps CI/CD pipelines to automate API deployments and configuration using GitLab and Jenkins
* Enforced security best practices in GitLab by implementing branch protection rules, required code reviews, and token expiration policies..
* Responsible for building Failover mechanisms using S3 versioning and Route 53 policies to ensure zero-downtime delivery.
* Developed Python-based Lambda functions to update RUM scripts with dynamic secret injection via AWS Secrets Manager.
* Integrated SAST (SonarQube) and DAST in CI/CD; partnered with security teams for vulnerability remediation and compliance.
* Monitored infrastructure using CloudWatch, Splunk, and Datadog; created custom Splunk dashboards for CI/CD metrics and alerts.
* Built and managed CI/CD pipelines using Jenkins, GitLab, and UCD for automated deployment of different applications.
* Implemented GitLab Runners and merge request triggers to auto-provision infrastructure and standardize microservices deployments.
* Integrated Terraform plan checks and pre-deployment validation jobs into CI/CD pipelines, improving infrastructure deployment reliability and reducing failures by 40%.
* Enforced IAM role-based policies and MFA, applying AWS best security practices across environ

**Project-2:**

**Migration of Atlassian Confluence & Jira to AWS:**

Successfully migrated on-premises Atlassian products to AWS leveraging cloud-native solutions, enhancing collaboration and efficiency. Supported and maintained mission-critical workloads on AWS, ensuring high availability and exceptional user experiences.

* Supported and maintained mission-critical workloads on AWS, ensuring high availability and exceptional user experiences.
* Orchestrated end-to-end migration of Atlassian Confluence and Jira to AWS, ensuring smooth transition and risk mitigation.
* Implemented highly available AWS architecture with EC2, EBS, EFS, S3, and RDS to meet performance requirements.
* Managed Docker containers on ECS/EKS, improving application scalability and availability.
* Designed and implemented CI/CD pipelines in Jenkins for Atlassian migration, reducing deployment time by 40%.
* Created Groovy-based shared libraries to standardize Jenkins code and reduce duplication.
* Migrated Jenkins freestyle jobs to pipeline-as-code, improving version control and maintainability.
* Integrated Nexus and Amazon ECR for efficient artifact storage and versioning.
* Embedded SonarQube and compliance checks into CI/CD pipelines to ensure security and policy enforcement.
* Automated multi-node Jira startup using CloudWatch Events, Lambda, and Systems Manager, ensuring sequential readiness.
* Deployed monitoring with CloudWatch, Dynatrace, Splunk, enabling proactive bottleneck detection and incident response.
* Used Dynatrace for application performance monitoring; used Splunk dashboards to reduce MTTR by 30%.
* Implemented Network-level monitoring and logging via VPC Flow Logs, enabling detailed analysis
* of traffic patterns and threat detection.
* Leveraged MoogSoft for intelligent alert management, reducing alert noise and improving response.
* Executed database migrations with DMS and Amazon RDS, minimizing downtime and data loss.
* Integrated SSO with Active Directory, simplifying access management and strengthening security.
* Wrote Python scripts for infrastructure automation, log parsing, and deployment orchestration in Kubernetes and AWS.
* Built custom CLI tools using Python to automate DevOps tasks and improve developer productivity.
* Used Boto3 and Kubernetes SDKs for monitoring and self-healing automation workflows.
* Applied cost optimization strategies: auto-scaling, reserved instances, rightsizing to balance cost vs. performance.
* Embedded IaC (CloudFormation) into CI/CD pipelines with Jenkins and UCD to provision AWS infrastructure.
* Developed backup and rollback strategies for data integrity and failure recovery.
* Tuned system performance by implementing bottleneck detection and remediation strategies.
* Automated infrastructure provisioning and scaling events using Terraform and Python,
* aligning with SRE principles of reliability and automation.
* Configured AWS Auto Scaling and CloudWatch Alarms to monitor resource utilization; implemented automated alerting at 75% resource usage, improving incident response times
* Ensured compliance and audit-readiness via DAST, SAST, IRR scans, and alignment with P2P security standards.
* Provided 24/7 technical support, showcasing problem-solving and incident resolution skills.
* Authored comprehensive documentation for architecture, processes, and support handovers.
* Diagnosed and resolved complex performance issues, improving application responsiveness.
* Applied strong Linux administration skills for troubleshooting and system support.
* Participated in on-call rotations for 24/7 incident support, ensuring system uptime and minimal disruptions.
* integrated Jira with tools like GitLab, bitbucket, and CI/CD pipelines to automatically update issues during code merges or deployments.
* provided support for teams using Confluence, including creating knowledge bases and guiding team members on best practices.
* Owned the change management process by documenting deployment steps, rollback plans, and validating changes in staging before production rollout.
* Led the response during high-severity production incidents, coordinated communication with stakeholders, and ensured timely resolution and post-incident analysis.
* Configured policies for traffic management, authentication (OAuth 2.0, API key), quota enforcement, and response transformation in Apigee.
* supported Jira and Confluence users by resolving access issues, fixing configuration errors, and answering day-to-day tool usage questions.

**Environment & Tools:** AWS (EC2, S3, VPC, CloudFormation, IAM, Storage Gateway, S3, Glacier, Auto Scaling, Lambda, EKS, Elastic Beanstalk, CodeCommit, CloudTrail, OpsWorks, CloudFront, Route 53, EMR, Redshift, Direct Connect, SNS, SQS, DynamoDB, ELB, ElasticCache), Terraform, Terragrunt, CloudFormation, Ansible, Jenkins, Kubernetes, Helm Charts, Packer, Python, Splunk, App Dynamics, CloudWatch, Dynatrace, Docker, Maven, Git, Gitlab, Web Hooks, VPC Networking, RDS (MySQL), Apache, Tomcat, Nginx, Kafka, Zookeeper, Zabbix, Perl Scripts, Bash Shell, JSON, AWS CLI.

**E-Trade – Arlington, VA Jun 2020 – Mar 2023**

**AWS/DevOps Engineer**

* Designed and deployed highly available, auto-scaling AWS infrastructure.
* Leveraged AWS services like VPC, EC2, RDS, S3, Lambda, ECS, EKS, and CloudWatch.
* Configured VPCs, subnets, security groups, ELBs for scalable environments.
* Automated infrastructure provisioning using Terraform.
* Managed IAM, Route 53, CloudWatch alarms, and SNS notifications.
* Built CI/CD pipelines using Jenkins, Ansible, Git.
* Managed Kubernetes clusters with Kops and Helm.
* Monitored performance using Datadog, Zabbix, CloudWatch.
* Orchestrated Docker containers and Kubernetes deployments.
* Implemented infrastructure automation with Ansible and version control with Git.

**Environment & Tools**: AWS (EC2, VPC, ELB, S3, RDS, IAM, Cloud Trail and Route 53), GIT, Bitbucket, VPC, Route53, EBS, SQL, ELB, Cloud watch, Cloud Formation, Terraform, Kubernetes, Helm Charts, Packer, Ansible, Docker, Maven, AWS CLI, AWS Auto Scaling, Unix/Linux, Shell scripting, Agile, Jenkins, Nexus, Nagios WebLogic, TOMCAT, Python Scripts, Perl Scripts, Ruby Scripts, XML, Oracle, Unix.

### State Street – Boston, MA May 2018 – May 2020

### AWS/DevOps Engineer

* Administered AWS services: EC2, VPC, ELB, S3, RDS, Lambda, DynamoDB, CloudWatch.
* Automated deployments using Terraform, Ansible, Docker, Kubernetes.
* Deployed containers on ECS and managed applications using Helm.
* Built CI/CD pipelines with GitLab, Jenkins, GitHub Actions.
* Used Jenkins with Git and Maven for build scheduling.
* Implemented monitoring and logging with Splunk, CloudWatch, and Nagios.
* Automated with Python, Shell, Bash scripting for secure cloud architecture.

**Environment & Tools**: AWS (ELB, VPC, EC2, IAM, NACL, Security Group, Route 53, S3, CloudFront, ElastiCache, Elastic Beanstalk, Trusted Advisor, CloudTrail, CloudFormation, RDS (MYSQL, Oracle)), Chef, Jenkins, Java/Java2EE, GIT, Jira, Maven, Nexus, Apache Tomcat, Data Dog, Nagios, JIRA, Perl, Ruby, YAML, Json, Python.

### Givelify – Indianapolis, IN Apr 2016 – Apr 2018

### AWS/DevOps Engineer

* Deployed AWS solutions using EC2, VPC, ELB, Lambda, CloudFront, CloudFormation.
* Automated EKS provisioning using CloudFormation.
* Used Chef for infrastructure automation (cookbooks, recipes, configuration).
* Developed Python scripts with Chef for Java app deployments.
* Built CI/CD pipelines using Jenkins, PowerShell, Docker.
* Deployed Docker containers to ECS and automated with CloudFormation.
* Managed Apache, Firewalls, shell scripting, and production support.

**Environment & Tools**: AWS (ELB, VPC, EC2, IAM, NACL, Security Group, Route 53, S3, CloudFront, ElastiCache, Elastic Beanstalk, Trusted Advisor, CloudTrail, CloudFormation, RDS (MYSQL, Oracle)), Chef, Jenkins, Java/Java2EE, GIT, Jira, Maven, Nexus, Apache Tomcat, Data Dog, Nagios, JIRA, Perl, Ruby, YAML, Json, Python.

### Jama Software – Portland, OR Dec 2015 – Mar 2016

### DevOps Engineer

* Automated VPC creation with CloudFormation for multiple AWS accounts.
* Managed S3, EC2, SQS, SES, SNS, Route 53 assets.
* Automated build/deploy using ANT, Maven, Jenkins, Shell/Perl.
* CI/CD deployment in JBoss App Server.
* Release planning and coordination across large teams.

**Environment & Tools:** AWS, Clear Case, Jenkins, Java/J2EE, ANT, MAVEN, DB2, UNIX, Windows Server 2003 Windows XP, Web Sphere, Perl Scripting

### Wipro – India Mar 2014 – Nov 2015

### Linux Administrator

* Administered UNIX/Linux servers.
* Managed DNS, DHCP, NFS, FTP, SSH, LDAP, Squid services.
* Resolved network issues using tools like ping, traceroute, TCP dump.
* Maintained server security and performance.