**Name: Prudhvi Raj Annamdas**

**Role: Sr. DevOps Engineer**

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**PROFESSIONAL SUMMARY**

* Senior DevOps Engineer with 10+ years of experience in architecting, automating, and optimizing cloud-based infrastructures and CI/CD pipelines to accelerate software delivery and system reliability.
* Expertise in AWS, Azure, and GCP, leveraging EC2, Lambda, S3, RDS, Kubernetes (EKS, AKS, GKE), Athena, and Step Functions to build scalable, enterprise-grade solutions.
* Proficient in containerization using Docker and Kubernetes, with automated deployments via Helm for high availability, efficient resource management, and scalability.
* Strong Infrastructure as Code (IaC) experience with Terraform and Ansible, ensuring consistent, automated infrastructure provisioning across multiple environments.
* Extensive CI/CD expertise using Jenkins, AWS CodePipeline, GitLab CI, and CircleCI, streamlining software delivery cycles and enhancing continuous integration and deployment.
* Skilled in proactive monitoring & logging with ELK Stack, Prometheus, Grafana, CloudWatch, and Datadog, ensuring system reliability and rapid issue resolution.
* Hands-on experience with databases, managing MySQL, PostgreSQL, MongoDB, and DynamoDB, integrating them with APIs for high-performance data processing.
* Expert in automation scripting using Python, PowerShell, and Bash, optimizing workflows, reducing manual effort, and enhancing deployment processes.
* Applied security best practices, implementing IAM, AWS KMS, VPNs, WAF, and Azure Security Center to ensure compliance and secure cloud environments.
* Strong Agile and collaboration skills, using JIRA and Confluence to manage projects, foster cross-functional teamwork, and align DevOps strategies with business objectives.

**TECHNICAL SKILLS**

* **Cloud Platforms:**

**AWS:** Lambda, EC2, S3, RDS, DynamoDB, CloudFormation, EKS, Glue, CodePipeline, IAM, Route 53, CloudWatch, AWS WAF, AWS KMS.

**GCP:** GKE, Cloud Functions, BigQuery, Cloud Storage, Cloud SQL, Pub/Sub.

**Azure:** Azure DevOps, Virtual Machines, Functions, Key Vault, Azure SQL, Blob Storage, Active Directory.

* **Networking & Servers:** VPC, Nginx, Load Balancers, DNS, Firewalls, Protocols.
* **Databases & Data Engineering:** PostgreSQL, MongoDB, Cassandra, DynamoDB, Aurora, BigQuery, NoSQL, Glue, Airflow.
* **Kubernetes & Containers:** Bare-metal Kubernetes, AKS, EKS, GKE, Istio, KEDA, Docker, Helm, ArgoCD, OpenShift.
* **Security & Compliance:** AWS WAF, AWS Shield, IAM, HashiCorp Vault, Role-Based Access.
* **CI/CD & Automation:** Jenkins, CodePipeline, Azure DevOps, GitLab CI, Terraform, Ansible, Shell Scripting (Bash), Python, PowerShell.
* **Monitoring & Logging:** ELK Stack, Prometheus, Grafana, CloudWatch, Datadog, Splunk.
* **Programming:** Golang, Python, Bash.
* **Tools & Collaboration:** Git, GitHub, Bitbucket, JIRA, Confluence, Slack, JFrog Artifactory.

**CERTIFICATIONS**

* Certified AWS DevOps Engineer - Professional
* Certified Azure Fundamentals
* HashiCorp Certified Terraform Associate

**EDUCATION**

Master’s Degree : Master of Science in Business Analytics, Saint Peter's University, NJ (2016)

Bachelor’s Degree: B. Com (Honors), Loyola Academy, HYD, India (2012)

**WORK EXPERIENCE**

**Client & Location: Hudson's Bay Company, NYC Dec 2022-Present**

**Sr. DevOps Engineer**

* Architected scalable cloud solutions using AWS EC2 (Elastic Compute Cloud), S3 (Simple Storage Service), RDS (Relational Database Service), DynamoDB, Lambda, API Gateway, EKS (Elastic Kubernetes Service), EMR (Elastic MapReduce), and Route 53, supporting high-traffic eCommerce environments.
* Enhanced ETL pipelines with Apache Airflow and AWS Glue, processing large datasets (CSV, JSON, Avro) for reliable data flow in retail operations.
* Designed data architectures with Snowflake and AWS Athena for real-time querying and analytics, improving sales forecasting and decision-making.
* Built Big Data processing pipelines using AWS Glue, EMR, and Apache Spark, enabling SQL-based transformations and analytics for inventory management.
* Implemented AWS Step Functions for serverless workflow orchestration, automating order processing and error handling with AWS Lambda and API Gateway.
* Developed RESTful APIs with AWS API Gateway and Lambda, ensuring seamless integration with eCommerce platforms and third-party services.
* Integrated SonarQube with AWS CodePipeline for automated static code analysis, ensuring security compliance and enforcing best coding practices.
* Configured SonarQube Quality Gates for Terraform, Python, and Shell scripts, preventing misconfigurations and maintaining Infrastructure as Code (IaC) standards.
* Automated CI/CD pipelines using Harness and Terraform, improving software deployment reliability, reducing downtime, and accelerating release cycles.
* Integrated Harness for GitOps-based deployment, ensuring secure and efficient EKS application rollouts with zero downtime.
* Deployed and managed Kubernetes (EKS) applications, leveraging Nginx for ingress management, ensuring high availability and fast response times.
* Configured Datadog and AWS CloudWatch for monitoring cloud infrastructure and Kubernetes clusters, tracking CPU, memory, transaction volume, and user engagement metrics.
* Automated DNS management with AWS Route 53, ensuring scalable and consistent access to the eCommerce platform across multiple regions.
* Implemented security best practices using AWS WAF (Web Application Firewall), AWS Shield, IAM policies, and HashiCorp Vault, securing data, transactions, and cloud infrastructure.
* Developed automation scripts in Shell and Python for infrastructure management, log processing, and configuration tasks, improving operational efficiency.
* Optimized real-time data ingestion pipelines using Apache Kafka, enabling efficient batch and streaming data processing.
* Integrated Snyk.io into CI/CD pipelines, ensuring continuous security scanning for Terraform, Python, and containerized applications, identifying vulnerabilities early in the development cycle.
* Implemented New Relic for full-stack observability, improving Kubernetes-based application monitoring and real-time alerting for performance degradation.
* Documented end-to-end CI/CD workflows, infrastructure automation, and security configurations in Confluence, enhancing collaboration, onboarding, and compliance in Agile Scrum environments.
* Maintained detailed infrastructure and deployment documentation, ensuring seamless knowledge transfer and reducing operational bottlenecks.

**Environment:** AWS (EC2, S3, RDS, DynamoDB, Lambda, API Gateway, Glue, EKS, EMR, Route 53, CloudFormation, WAF, Shield, CloudWatch), Terraform, Kubernetes (EKS), Nginx, Harness, Apache Airflow, Apache Spark, Datadog, HashiCorp Vault, Shell Scripting, Python, Apache Kafka, Snyk.io, New Relic, Confluence (Documentation).

**Client & Location: Wells Fargo | Charlotte, NC Feb 2021-Nov 2022**

**DevOps Engineer**

* Deployed scalable AWS EC2 instances with optimized VPC DHCP configurations for dynamic IP allocation and seamless communication.
* Automated data processing and alert monitoring using AWS Lambda.
* Designed RESTful APIs with Python and NodeJS for database and third-party platform communication.
* Built responsive ReactJS frontend components for efficient interaction with backend systems.
* Optimized AWS S3, EBS, and Glacier with lifecycle policies for cost efficiency and data management.
* Managed RDS (MySQL) and MongoDB databases, integrating them with APIs for high-performance data access.
* Configured VPCs with subnets, route tables, and security settings for secure and reliable networking.
* Set up Route 53 for scalable DNS routing, failover configurations, and automated domain updates.
* Implemented ELK Stack for centralized log analysis, debugging, and system monitoring.
* Configured Datadog for infrastructure monitoring, dashboards, and performance tracking.
* Automated infrastructure provisioning using AWS CloudFormation.
* Built and managed CI/CD pipelines with Jenkins, AWS CodePipeline, and Harness for automated testing and deployments. Utilized Harness for progressive delivery, rolling deployments, and release orchestration to minimize downtime and ensure reliable deployments.
* Deployed Docker containers and orchestrated Kubernetes clusters for high availability and scalability.
* Automated server configurations with Ansible playbooks for consistency and reliability.
* Developed Python scripts and Apache Airflow workflows for API integration and ETL processes.
* Implemented Kafka for real-time data streaming between distributed services.
* Integrated Big Data tools like Apache Spark, AWS EMR, and Athena for batch and stream processing.
* Applied security controls, compliance frameworks, and incident response procedures.
* Designed Big Data workflows with Airflow for data transformation and analytics.
* Processed and stored data in JSON and CSV formats for interoperability.
* Applied advanced SQL querying techniques for database management and reporting.
* Created and maintained comprehensive documentation for infrastructure setups, deployment strategies, automation workflows, and troubleshooting guides. This improved knowledge transfer, operational efficiency, and audit compliance.

 **Environment:** AWS (EC2, Lambda, S3, RDS, Route 53, IAM, CloudFormation, EMR, Spark, Athena), Git, Jenkins, AWS CodePipeline, Harness, Ansible, Docker, Kubernetes, ELK Stack, Datadog, Python, Apache Airflow, Kafka, TCP/IP, DNS, DHCP, VPNs, RESTful APIs, NodeJS, SQL, JSON, CSV, Agile Scrum, Confluence.

**Client & Location:** **Walgreens Boots Alliance, Bloomington, Illinois Oct 2018-Jan 2021**

**DevOps Engineer**

* Implemented and managed GCP infrastructure using Compute Engine for scalable and efficient computing resources.
* Automated deployment processes using Python scripts for streamlined and error-free deployments.
* Orchestrated containerized applications using Docker and Kubernetes Engine (GKE) for efficient container management.
* Utilized Helm to manage Kubernetes application deployment and versioning.
* Developed and maintained serverless functions using Cloud Functions for event-driven architecture.
* Managed data storage and retrieval using Cloud Storage for scalable and reliable data storage solutions.
* Configured and optimized Cloud SQL databases for high availability and performance.
* Implemented event-driven architecture using Cloud Pub/Sub for real-time messaging and integration.
* Designed and optimized data pipelines using BigQuery for large-scale data processing and analytics.
* Automated build and deployment pipelines using Jenkins for continuous integration and continuous deployment (CI/CD).
* Monitored and analyzed system performance using New Relic for proactive performance management.
* Wrote and maintained Bash scripts for automation and task scheduling.
* Managed relational databases like PostgreSQL and NoSQL databases like Cassandra for data storage and retrieval.
* Managed artifact repositories using Artifactory for version control and artifact management.
* Automated infrastructure provisioning and configuration using Puppet for infrastructure as code (IaC).
* Managed build processes using Maven and ANT for efficient project builds and dependency management.
* Implemented CI/CD pipelines using GitLab CI for automated testing and deployment.
* Configured and managed Cloud Load Balancing for scalable and fault-tolerant applications.
* Implemented and managed VPCs for secure network isolation and access control.
* Implemented OAuth for secure authentication and authorization.

**Environment:** GCP (Compute Engine, GKE, Cloud Functions, Cloud Storage, Cloud SQL, Cloud Pub/Sub, BigQuery, Jenkins, GitLab CI, Docker, Helm, Puppet, New Relic, Bash, Python, Maven, ANT, Artifactory, Cloud Load Balancing, VPC, OAuth.

**Client & Location: Visa Inc, Ashburn, VA July 2016-Sep 2018**

**DevOps Engineer**

* Automated infrastructure provisioning and configuration using PowerShell, ensuring efficient and consistent deployment of resources.
* Implemented end-to-end CI/CD pipelines using Azure DevOps, facilitating continuous application integration, delivery, and deployment.
* Managed version control and collaboration using BitBucket, enabling seamless code management and team collaboration.
* Orchestrated cloud resources and services in Microsoft Azure, including Azure Virtual Machines and Azure Virtual Networks, for scalable and resilient infrastructure.
* Containerized applications using Docker, optimizing deployment and management of applications across environments.
* Managed Kubernetes clusters (AKS) for container orchestration, ensuring scalability, high availability, and efficient resource utilization.
* Deployed and managed web applications on Azure using Azure App Service and Azure Functions, ensuring reliable and scalable application hosting.
* Tracked and managed project issues using Bugzilla, facilitating efficient bug tracking and resolution within the development lifecycle.
* Implemented monitoring and alerting using Prometheus and Grafana, ensuring real-time system performance and health visibility.
* Automated infrastructure configuration and management using Chef, enabling infrastructure as code (IaC) practices for consistency and scalability.
* Utilized ARM templates for infrastructure provisioning and management in Azure, streamlining resource deployment and management.
* Implemented load balancing and traffic management using Azure Load Balancer, ensuring high availability and optimal application performance.
* Managed binary artifacts and dependencies using Nexus repository manager, ensuring reliable artifact storage and deployment versioning.
* Implemented secure networking using VPNs and Application Gateway, ensuring safe access and communication within the infrastructure.
* Facilitated team communication and collaboration using Microsoft Teams and Confluence, enabling seamless collaboration and knowledge sharing among team members.
* Ensured compliance with industry standards and best practices in DevOps processes and workflows.

**Environment:** Microsoft Azure (Azure Virtual Machines, Azure Virtual Networks, AKS, Azure App Service, Azure Functions, Azure Load Balancer, ARM templates, VPNs, Application Gateway), PowerShell, Azure DevOps, BitBucket, Docker, Chef, Prometheus, Grafana, Nexus repository manager, Bugzilla, Microsoft Teams, Confluence.

**Client & Location: Livyst, Hyderabad May 2012-Dec 2014**

**Build and Release Engineer**

* Orchestrated the continuous integration and deployment pipelines leveraging Jenkins, ensuring the smooth integration of code alterations and automated testing.
* Implemented version control strategies using GitHub, including branching and merging workflows to maintain code integrity and collaboration among development teams.
* Orchestrated infrastructure configuration and deployment using Puppet, streamlining the deployment process and ensuring consistency across environments.
* Utilized shell script (Bash) and Python for automation tasks, enhancing build and release processes efficiency and enabling rapid troubleshooting.
* Employed Docker for containerization packaging applications and their dependencies for consistent deployment across multiple environments.
* Oversaw container orchestration with Kubernetes, managing and scaling containerized applications efficiently and effectively.
* Simplified multi-container application deployment using Docker Compose, quickly defining and running complex application stacks.
* Managed binary artifacts with Artifactory, ensuring reliable storage and versioning of artifacts for deployment and collaboration.
* Automated infrastructure provisioning and management using Terraform, enabling infrastructure as code (IaC) practices for scalability and repeatability.
* Monitored system health and performance with Nagios, implementing proactive measures to ensure high availability and performance of applications.
* Supported team communication and collaboration with Slack, promoting real-time communication and sharing insights among team members.
* Collaborated on projects and tasks using Microsoft Teams, leveraging its chat and video meeting capabilities for seamless team collaboration.
* Tracked and managed project tasks and issues using Jira, following Agile methodologies for efficient project management and delivery.
**Environment:** Jenkins, GitHub, Puppet, Bash, Python, Docker, Kubernetes, Docker Compose, Artifactory, Terraform, Nagios, Slack, Microsoft Teams, Jira.