Vineeth Kumar Boddu

* [vineeth1boddu@gmail.com](mailto:vineeth1boddu@gmail.com)  +1 7433452209  Cincinnati, OH  [VineethKumar](mailto:www.linkedin.com/in/vineeth-kumar-boddu)   [VineethKumar](mailto:https://github.com/vineethkumar3/)



**PROFESSIONAL EXPERIENCE**

# Client: Walmart

# Sr SRE/DevOps Engineer

12/2023 – Present | Dallas, Texas

* Designed comprehensive monitoring dashboards in **Datadog** to offer transparent insights into alerting conditions and system performance.
* Configured Datadog proactive alerting features to automatically create incident tickets according to the seriousness of the problem.
* Troubleshooted the **root cause** of recurring system issues and implemented strategies in an effective way to prevent future incidents.
* Expertise in implementing **automation tools** like Bash, Perl, Terraform and Ansible to reduce the manual and repeated tasks in this way to improve system reliability.
* Designed a dashboard to monitor the system performance metrics, identifying bottlenecks and implemented necessary actions to improve the stability.
* **Disaster recovery methods** have been developed to protect important data and ensure rapid recovery in the event of a system failure.
* Implemented strict **security methods** by fixing possible vulnerabilities and implementing Linux strengthening procedures.
* Implemented AWS solutions using EC2, S3, EBS, RDS, Elastic Load Balancing (ELB), Auto - scaling groups, Elastic IP, CloudWatch, CloudFormation, Optimized volumes, and EC2 instances and managing Security Groups on AWS, focusing on High availability and Auto-Scaling.
* Creating S3 buckets and maintained and utilized the policy management of S3 buckets and Amazon Glacier for storage and backup on AWS.
* Worked on AWS cloud to provision new instances, AWS S3, AWS EC2, Cloud Watch services, and CI/CD pipeline management through Jenkins.
* Created AWS CloudFormation scripts for hosting software on AWS cloud and automating the installation of software through Shell scripts and wrote JSON templates for CloudFormation and ruby scripts for chef automation and contributing to our repository in Bitbucket and used TeamCity for CI to trigger multiple builds, tools like Jira, Bitbucket.
* Container management using Docker by writing Docker files and set up the automated build on Docker HUB and installed and configured Kubernetes.
* Use of Docker and Kubernetes to manage micro services for development of continuous integration and continuous delivery.
* Used Kubernetes to deploy scale, load balance, and manage docker containers with multiple names spaced versions.
* Configured Maven repositories and multi-component projects with Nexus to Artifactory and scheduled in Jenkins for CI.
* Used Chef for configuration management of hosted Instances within GCP. Configuring and Networking of Virtual Private Cloud (VPC).
* Involved in Jira as defect tracking system and configure various workflows, customizations and plug-ins for Jira bug/issue tracker integrated Jenkins with Jira, SVN and worked in integrating Git into the CI environment along with Jenkins configured the services using modern DevOps tools.
* Prototype CI/CD system with GIT Lab on GKE utilizing Kubernetes and Docker for the runtime environment for the set up the Jenkins configurations, make sure the project teams can switch to the new platform.
* Maintained Bitbucket Repositories which includes Jenkins and Jira Integration, creating new repositories, enabling Git to ignore, branching, merging, creating pull requests and the access control strategies from Bitbucket.
* Developed automation scripting in Python using chef to deploy and manage Java applications across Linux servers.

**Environment**: Datadog, Grafana, Prometheus, ELK, AWS (EC2, S3, EBS, RDS, Elastic Load Balancing (ELB), Auto - scaling groups, CloudWatch, VPC, CloudFormation), CI/CD, Jenkins, Chef, JSON, Jira, Docker, Kubernetes, Terraform, Shell Scripting, Nexus, Maven, Git, GitLab, JBoss, Apache Tomcat, SVN, Python, Perl, Linux, Splunk.

**Client: Target** 08/2021 – 09/2023 | Minneapolis, Minnesota

**Sr SRE Engineer**

* Defined and monitored Service Level Indicators (SLIs) and Service Level Objectives (SLOs) to ensure optimal system performance and availability.
* Implemented comprehensive monitoring solutions using **Prometheus**, **Grafana**, and **Azure Monitor** to track application performance and system availability.
* Managed environment configurations, ensuring consistent deployments across dev, test, and production environments.
* Designed and implemented end-to-end monitoring solutions using **Prometheus**, **Grafana**, and **Datadog**, improving system visibility and reducing mean time to detection (MTTD) by **30%**.
* Integrated **ELK Stack** (Elasticsearch, Logstash, Kibana) for centralized logging and enhanced troubleshooting capabilities.
* Lead the design and implementation of Azure hosted environments and migrate existing on-premises infrastructure to Azure
* Automated cloud native applications into azure and also Kubernetes on azure.
* Designed and executed comprehensive disaster recovery plans, ensuring system recovery within established Recovery Time Objectives (RTO) and Recovery Point Objectives (RPO).
* Create and Maintain CI/CD pipelines and tooling to ensure the consistent and accurate deployments. Setup GitHub Actions for many Productions and Non-production Teams.
* Be a technical advisor and perform troubleshooting to resolve technical challenges with cloud infrastructure.
* Worked with Terraform Templates to automate the Azure Iaas virtual machines using terraform modules and deployed virtual machine scale sets in production environment
* Written Templates for azure infrastructure as a code using terraform to build staging and production environments. Integrated Azure log Analytics with Azure VMS for monitoring log files, store them and track.
* Migrating an On-premises virtual machine to Azure Resource Manager Subscription with Azure Site Recovery.
* Involved on migrating SQL Server databases to SQL Azure Database using SQL Azure Migration Wizard and used Python API to upload agent logs into Azure blob storage.
* Worked with Terraform key features such as Infrastructure as code, Execution plans, Resource Graphs, Change Automation and extensively used Auto scaling for launching Cloud instances while deploying microservices.
* Managed an Active Directory site; replication schedules, site links and boundaries, used ADUC to create and manage computer, user, and group accounts in an Active Directory environment.
* Setup Azure Virtual Appliances (VMs) to meet security requirements as software-based appliance functions (firewall, WAN optimization and intrusion detections).
* Configured Azure Security groups and Network ACLs policies for additional layer of security.
* Performed the automation using Chef Configuration management and managing the infrastructure environment with puppet.
* Responsible for large-scale puppet implementation and maintenance. Puppet manifests creation, testing and implementation.
* Building/Maintaining Docker container clusters managed by Kubernetes Linux, Bash, GIT, Docker.
* Managed local deployments in Kubernetes, creating local cluster and deploying application containers. Created private cloud using Kubernetes that supports DEV, TEST, and PROD environments.
* Configured and maintained Jenkins to implement the CI process and integrated the tool with Maven to schedule the builds. Took the sole responsibility to maintain the CI Jenkins server.
* Configured Jenkins for doing the build in all the non-production and production environments.
* Developing build using MAVEN as build tool and using Jenkins to kick off the builds to move from one environment to other environments.
* Written Shell scripts to apply the Integration label to all the files which needs manual labelling of files.

**Environment**: Datadog, Trivy, Azure Backup, CloudWatch, PagerDuty, Azure, CI/CD, Terraform, GitHub, Azure DevOps, Azure log Analytics, Python, REST API, Docker, Chef, Puppet, Kubernetes, Linux, Bash, GIT, Maven, Jenkins, Shell Scripting.

**Client: Edward Jones Investments** 04/2018 – 07/2021 | St. Louis, Missouri

**SRE/Cloud Engineer**

* Responsible to build and deploy web applications in Windows and Linux environment On-premise and AWS Cloud.
* Responsible to launch Amazon EC2 Cloud Instances using Amazon Web Services and configure the launched instances with respect to specific applications.
* Maintained the infrastructure (servers for different data centers) using AWS.
* Used to maintain Source Code Repository using GitHub and performed different operations like Branching, Merging and Tagging as needed.
* Maintained and enhanced existed Puppet modules, which are to be deployed across various providers and deployment architectures.
* Troubleshoot, event inspection and report various Puppet issues and responsible to start/restart of Puppet enterprise services.
* Managed Puppet classes, resources, packages, nodes and other common tasks using Puppet console dashboard and live management.
* Performed S3 buckets creation, policies and also on the IAM role based polices and customizing the JSON template.
* Managed Docker orchestration and Docker containerization using Kubernetes.
* Used Kubernetes to orchestrate the deployment, scaling and management of Docker Containers.
* Created Jenkins jobs to deploy applications to Kubernetes Cluster and wrote Jenkins files and worked with Bamboo and TeamCity which are also used for CI/CD tools.
* Implementing Docker (images/containers) by using CI/CD process in Jenkins.
* Implemented Puppet Master, Puppet Console, and Puppet Agents. And created Puppet modules and Classes.
* Installed applications on AWS EC2 instances and also configured the storage on S3 buckets.
* Developed and implemented Software Configuration Management strategies for various applications per the agile process.
* Involved in implementation and maintenance to monitor and alert the production and corporate servers/storage using AWS Cloud watch.
* Installation and Administration of Jenkins CI for ANT Builds.
* Developed build scripts using ANT as the build tool for the creation of (WAR files) build artifacts.
* Implementing Dockerization (Docker) for applications lunching containers and images.
* Involved in troubleshooting the automation of Installing and configuring JAVA applications in the test and pre-production environments.
* Responsible to find root cause analysis based on issues raised in systems.
* Developed automation scripting in Python (core) using Puppet to deploy and manage Java applications across Linux servers.
* Involved in Creating and Configuring Different Repositories in Nexus.
* Worked in agile modeled software development life cycle.

**Environment**: AWS (Ec2, Lambda, S3, CloudWatch, IAM) Amazon EC2, S3, Puppet, Jenkins, GitHub, Bamboo, TeamCity, Kubernetes, Docker, ANT, Nexus, CloudWatch, and Python

**Client: Pfizer Inc** 09/2016 – 03/2018 | New York

**Unix and Linux System Administrator/AWS**

* Created and configured AWS EC2 instances using preconfigured templates as well as used corporate based VM images which includes complete packages to run build and test in those EC2 Instances.
* Offered technical support and troubleshooting for cloud-based file transfer solutions.
* Worked closely with customers to understand their system setups and suggest the most effective solutions.
* Analyzed system logs, network traffic, and application data to detect potential problems or failures.
* Developed and maintained automation scripts in Bash and Perl to simplify system operations and maintenance.
* Assisted clients in utilizing AWS services such as EC2, S3, and IAM for scalable cloud-based infrastructures.
* Conducted root cause analysis on issues related to data exchange systems and took steps to prevent future occurrences.
* Created user guides and documentation to assist both technical and non-technical end-users during system onboarding.
* Collaborated with cross-functional teams, including developers and system architects, to solve technical issues.
* Ensured the health of systems by monitoring performance and implementing necessary fixes.
* Managed and maintained Linux servers (RHEL, CentOS, Ubuntu) in cloud environments such as AWS and Azure.
* Used Datadog and Splunk for system monitoring and troubleshooting, optimizing performance.
* Implemented Linux hardening techniques and enforced security standards across the infrastructure.
* Deployed and managed Docker containers, optimizing Kubernetes clusters for improved scalability and security.
* Automated repetitive tasks using Bash and Ansible, streamlining processes and minimizing human errors.
* Troubleshot cloud infrastructure issues and guided L1/L2 teams in resolving them.
* Collaborated with cross-functional teams to ensure smooth deployment of cloud-based applications.
* Designed and implemented disaster recovery and high availability solutions for critical systems.
* Maintained documentation on system architecture, processes, and best practices for future reference.
* Configured firewalls, networking, and SSL certificates to boost system security.
* Applied security best practices across the infrastructure and continuously monitored for vulnerabilities.
* Assisted in resolving escalated issues from lower-level teams and ensured prompt resolution.
* Optimized system performance and resource usage in both cloud and on-premise environments.
* Provided ongoing support for cloud infrastructure and Linux-based systems, overseeing global teams for 24/7 operations.
* Administered and managed Linux-based systems, specifically RHEL 7 and above, ensuring high availability and performance.
* Deployed and configured AWS resources such as EC2, S3, ECS, EKS, and VPC to meet application requirements.
* Developed and managed containerized applications, using Kubernetes (EKS) for orchestration and scalability.
* Set up and managed CI/CD pipelines for automating deployments to EKS clusters, ensuring seamless code delivery.
* Regularly managed patches and resolved vulnerabilities using RedHat Satellite and other patching tools.
* Troubleshot system-level issues in Linux environments, including performance, latency, and service failures.
* Conducted system diagnostics and collected logs/dumps to analyze and resolve issues quickly.
* Automated operational tasks with tools like Ansible and Bash, boosting efficiency.

**Environment**: AWS (IAM, EC2, S3, SNS, RDS, ELB, Auto Scaling), Datadog, Splunk, Bash, Perl, Ansible, Docker, Kubernetes RedHat Satellite, SELinux, iptables, SSL certificates, AWS Security Groups, Azure Network Security Groups, and CI/CD pipeline tools

**Client: Openxcell Technologies** 06/2014 – 10/2015 | Hyderabad, India

**SR Azure/ DevOps Engineer**

* Configured and maintained Jenkins to implement the Pipeline and integrated Jenkins with Maven to schedule the builds using POM.XML file.
* Automated application deployment from TFS using build templates that trigger PowerShell scripts.
* Configured TFS to run CI builds and execute unit tests on all check-ins for .net web applications.
* Installed/Configured and Managed Artifactory Repository Manager (Docker registry Setup).
* Generated reports using SonarQube which covers different areas of Code quality like potential bugs.
* Worked with IAM service creating new IAM users & groups, defining roles and Identity providers.
* Installed/Configured and Managed GitLab SCM for CI/CD Workflow.
* Worked on changing the application run time process using Shell and python scripts for WebLogic configuration and shell scripts for database configuration.
* Worked with Cloud-based solutions like AWS for deploying on-demand Windows and Linux environments using EC2 and AMI, S3, IAM, EBS for cloud storage services, ELB, and Auto-scaling, load-balancing and highly scalable environments, VPC for virtual public and private networking.
* Implemented automated deployments with Docker-compose for scalable application deployment.
* Worked with Docker and Puppet on AWS, from helping developers and testers to build and containerize their application (CI/CD) to deploying on AWS Public cloud.
* Used Cloud-Watch logs to move application logs to S3 and create alarms and notifications for EC2 hosts using Cloud Watch.
* Securing the GCP infrastructure using Private subnets, Security groups, VPC, etc.
* Create alarms based on a few exceptions raised by applications.
* Wrote YAML scripts to be deployed to Tomcat Web Server and WebSphere App Servers.
* Configured Puppet to manage AWS environments and automate the build process for core AMIs used by all application deployments including Terraform Scripts and Puppet.
* Performed setup of clustered environment setups with WebSphere Application Server.
* Created Puppet Manifests for automating deployments of application Containers.
* Deployed LAMP based applications in AWS environments, including provisioning MYSQL- RDS and establishing connectivity between EC2 instance and MySQL-RDS via security groups.
* Worked with the documentation of Migration process, AWS Deployment setup, Application Stack deployments and Troubleshooting Scenarios.

**Environment**: Jenkins, Maven, Docker, SonarQube, .Net, IAM, GitLab, CI/CD, Python, Shell Scripting, AWS (EC2, S3, IAM, EBS, VPC, RDS), Puppet, GCP, Apache Tomcat, WebSphere, Terraform, MySQL.



# Bachelor of Computer Science 07/2010 – 05/2014

# Jawaharlal Nehru Technological University

# Grade: 8.5/10



**SKILLS**

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| --- | --- |
| **Cloud Technologies** | Microsoft Azure, Amazon Web Services (AWS), Google Cloud Platform (GCP) |
| **Containerization Tools** | Docker, Docker Swarm, Kubernetes, OpenShift |
| **CI/CD Tools** | Jenkins, Bamboo, GitLab CI, Travis CI, Hudson, TeamCity, CircleCI, Nexus, JFrog Artifactory |
| **Build & Testing Tools** | Maven, Ant, Gradle |
| **Version Control Tools** | Git, GitHub, Bitbucket, VSTS, TFS, SVN |
| **Web Servers** | Apache Tomcat, WebSphere, WebLogic, JBoss |
| **Monitoring & Bug Tracking Tools** | Splunk, Grafana, Prometheus, Confluence, Jira, Bugzilla |
| **Databases** | DynamoDB, MySQL, Cassandra, PostgreSQL, MongoDB, Oracle, SQL Server |
| **Operating Systems** | Windows, Linux/Unix |
| **Scripting/Programming Languages** | Python, Shell Scripting, Bash Shell, Ruby, Perl, Java |
| **Configuration Management** | Chef, Ansible, Puppet, Terraform |



**PROJECTS**

# Dynamic Cache Simulator

Implemented D-Cache, a dynamic caching technique in **Java**, to optimize system performance by adjusting cache size based on hit rate. Enhanced overall system performance by monitoring and dynamically increasing cache size when hit rate exceeded a threshold.

# Heart Disease Prediction using Machine Learning

Developed a Machine Learning algorithm for predicting the presence of heart disease in patients, utilizing various models including

**Random Forest**, **Support Vector Machine**, and **K-nearest neighbor** algorithm using **Python**.

# Data Compression using Huffman Coding

Implemented Huffman coding for lossless data compression using **Java**, with expertise in compressing bit strings representing text as well as image files. Demonstrated ability to achieve optimal compression ratios while maintaining data integrity, enhancing storage efficiency, and optimizing file transfer speeds.



**CERTIFICATES**

 AWS DevOps Engineer  Java Hacker Rank Certification