Keerthish Kodali

Sr. DevOps & Site Reliability Engineer

Versatile DevOps | SRE | Platform Engineer specializing in CI/CD, Cloud Automation, Infrastructure-as-Code, and Scalable System Reliability.

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| 14+ Yrs. Work Exp | 6 languages | Served 7 companies |

PROFILE SNAPSHOT

Senior DevOps and Cloud Engineer with over 14 years of IT experience and 9+ years in DevOps automating infrastructure, optimizing CI/CD pipelines, and deploying enterprise-scale cloud solutions. Specialized in build systems, container orchestration, GitOps, and developer productivity tooling. Proven expertise in hybrid cloud environments (Azure and AWS), and Kubernetes (AKS, EKS) deployments using Helm and Terraform. Skilled in implementing cost optimization through multiple monitoring tools, enabling GitOps workflows with GitHub Actions and GitLab CI/CD, and designing high-availability solutions. Adept at integrating security, monitoring, and automation into release engineering, while mentoring teams and ensuring high system availability.

Key Achievements

- Automated complex CI/CD pipelines using Jenkins (scripted and declarative), Groovy shared libraries, and multibranch workflows, increasing deployment velocity by over 50%.
- Designed and deployed secure, scalable cloud environments using Azure services such as AKS, VMs, VNets, Key Vault, Azure Monitor, Storage, Active Directory, SQL Database, PostgreSQL, MongoDB and Azure DataBricks.
- Containerized application deployments with Docker and orchestrated workloads using Azure Kubernetes Service (AKS), improving infrastructure scalability and resilience.
- Streamlined infrastructure provisioning using Ansible ,Chef and Terraform reducing configuration time and manual errors across environments.
- Deployed trained machine learning models as inference APIs within Java and Node.js applications, automating delivery to Azure VMs and App Services using Jenkins pipelines.
- Enabled production-grade chatbot solutions by integrating ML models into Azure Bot Service infrastructure, supporting secure, scalable, and low-latency user interactions.
- Supported multi-environment ML application delivery, improving performance, stability, and traceability across development, QA, and production stages.
- Built and deployed Java/J2EE and Node.js applications through Jenkins pipelines integrated with Maven and Git-based version control.
- Integrated Azure DataBricks workflows into Jenkins pipelines for automated data processing, enhancing development and deployment efficiency.
- Hands-on experience with HDInsight (Hadoop) cluster monitoring and operational support using Ambari and Azure, including Spark/YARN service management and performance troubleshooting.
- Led a geographically distributed DevOps team of 5 (onsite and offshore), ensuring delivery excellence, operational readiness, and infrastructure uptime.
- Applied Generative AI in DevOps through Prompt Engineering (certified by Vanderbilt University), improving automation, documentation, and CI/CD workflow enhancements.
- Implemented proactive observability with Azure Monitor, Prometheus, and Airflow, defining SLIs/SLOs to meet reliability goals and reduce MTTR. Led incident response and post-mortem reviews for production outages, improving system resilience and recovery time.
- Created Grafana dashboards to monitor Event Hub and Cosmos DB metrics via Azure Monitor, enabling real-time alerting and improved reliability tracking.
- Automated tasks and custom deployment flows using PowerShell, Ruby, and Groovy scripts for maximum efficiency.
- Managed hybrid release and incident workflows using Jira, ServiceNow, and Remedy to streamline team collaboration and issue resolution.
- Ensured business continuity by managing backup and recovery strategies using NetBackup and Backup Exec.
- Strong understanding of Agile, DevOps, and SDLC best practices to support continuous delivery and team collaboration across large-scale enterprise projects.

TECHNICAL SKILLS

Cloud Platforms: AWS, Azure | CI/CD: Jenkins, GitHub, Maven, Gradle | Containerization: Docker, Kubernetes, Helm

IaC: CloudFormation, ARM Templates **|** Configuration Management: Ansible, Chef, Puppet **|** Monitoring & Logging: Grafana, Prometheus, Splunk, ELK Stack, Azure Monitoring **|** Version Control: Git, GitHub, Bitbucket **|** Programming: Python, Bash, RUBY ,PowerShell, YAML, Java **|** Artifact Management Tools: Nexus, JFrog **|** Networking: DNS, TCP/IP, Load Balancers, Virtual Networks **|** Automation: Scripting, Deployment Pipelines, Provisioning Tasks **|** Collaboration: JIRA, Confluence, Agile Processes **|** Operating systems: Linux , Unix,Windows | Databases: SQL, My SQL ,Oracle ,Mongo Db , PostgreSQL , Redis (Azure Redis Cache) |

WORK EXPERIENCE

DevOps Lead / Cloud / Platform Engineer
Kaiser Permanent – Pleasanton, CA
Apr 2018 - Present

Responsibilities:

- Implemented **AGILE/SCRUM methodologies** to enhance project execution, resulting in improved team collaboration and project delivery timelines.
- Managed **version controls using Git**, which improved code collaboration and version tracking among team members.
- Developed **CI/CD pipeline builds** using **Groovy scripts** and configured **Jenkins jobs**, leading to streamlined deployment processes and reduced build times.
- Maintained a dedicated **on-premise Jenkins environment** exclusive to the project team, consisting of one master and two slave nodes. Designed, monitored, and improved CI/CD pipelines for Java and Node.js applications across development, DEV, and QA environments.
- Performed routine **Jenkins administration** including plugin updates, job cleanups, system restarts, and node troubleshooting to ensure build continuity and deployment reliability.
- Worked in parallel with the enterprise **CloudBees Jenkins** team while independently supporting all local project-specific automation needs, including **Groovy-based shared libraries** and secure artifact promotions to Artifactory.
- Configured **JFrog Artifactory** for storing build artifacts generated from Jenkins pipelines across Java and Node.js applications. Managed versioning, cleanup policies, and artifact promotion between lower environments.
- Implemented **periodic backups** of key artifacts and logs to **Azure Blob Storage** to support recovery and compliance needs.
- Supported artifact management automation in collaboration with DevOps and development teams, ensuring smooth delivery workflows from code commit to deployment.
- **Architected and modernized** enterprise CI/CD pipelines for deploying Java-based applications (e.g., Watcher, HadoopRunner, DataReceiver) to **Azure HDInsight edge nodes**. Transitioned legacy Freestyle Jenkins jobs (with Maven and Artifactory integration) into a unified **Declarative pipeline** that dynamically triggered **Ansible roles**, enabling secure artifact promotion, environment-specific deployments, certificate-based HTTPS enablement, and robust **secrets management** via **Ansible Vault**, resulting in improved deployment efficiency and security.
- Managed and supported **Azure HDInsight (Hadoop) Spark and Kafka clusters**, including provisioning, **Ambari-based monitoring**, Spark log analysis, and troubleshooting across **YARN**, **Hive**, and **Spark** services. Performed **cluster scaling** via Azure Portal and ensured reliable data processing pipelines in collaboration with developer teams, leading to enhanced system reliability and performance.
- **Designed and automated the end-to-end deployment** of **Apache Airflow** (webserver, scheduler, and worker services) using **Ansible**, from development through production environments. Maintained and supported the solution extensively over several years, ensuring high availability and team-wide adoption across all stages of the SDLC, which improved workflow efficiency and system uptime.
- Developed **Ansible roles** for **Python package** updates and **RabbitMQ** installation and configuration, which streamlined the deployment process and reduced manual errors.
- Worked on **Jenkins files** and **Groovy scripts** to build applications on **Docker image containers**, store them over **Artifactory**, and deploy to multiple **Azure Kubernetes Service** (AKS) clusters, resulting in more efficient and scalable application deployment.
- Deployed Java and Node.js microservices to **Azure AKS clusters** using Jenkins pipelines integrated with **Helm charts**. Managed Helm values, image tags, and environment configurations for Dev, QA, and Pre-Prod stages.
- Gained hands-on familiarity with **AWS EKS, including cluster setup**, **node group scaling**, and integration of **IAM** roles with service accounts (**IRSA**), which enabled secure access for in-cluster applications and improved security posture.
- Managed **hybrid cloud infrastructure** with approximately 70% workloads on **Azure** and 30% on **AWS**, including **EC2** instances, **VPC** design, **IAM** role management, and governance policies for secure, scalable multi-cloud deployments.
- Implemented **continuous monitoring** and analysis of CPU and memory usage metrics for **30+ applications** across multi-environment **AKS namespaces** using **Prometheus** and **Grafana**. Leveraged 3-month usage trends to identify underutilized resources and applied **cost optimization** by reducing pod replica counts and right-sizing CPU and memory requests, resulting in substantial **infrastructure cost savings** and improved resource efficiency.
- Created and maintained **Azure Event Hubs** for streaming workloads; implemented **custom alerts** for outages and low message counts to ensure uninterrupted data flow, supporting seamless **Fitbit sync** and real-time application performance.
- Created Jenkins pipeline to deploy workflows to **Azure DataBricks** and also experienced in maintaining Az Databricks Environments.
- Automated **Databricks workflows** using CI/CD pipelines with tools like **Jenkins** and **Ansible**, ensuring seamless integration and deployment of Spark jobs.
- Managed and monitored **Databricks SQL Editor** operations, optimizing query execution for real-time and batch processing workloads, which improved data processing speed and accuracy

- Designed and implemented **Jenkins pipelines** to automate the deployment of Azure App Services, Bots, and associated front-end services, ensuring seamless delivery to production and non-production environments.
- Collaborated with AI/ML development teams to operationalize trained models embedded in Java and Node.js services, deploying them as **REST APIs** to Azure infrastructure.
- Automated CI/CD pipelines for **ML-based services** including chatbot backends, integrating Jenkins, Ansible, and YAML-based secrets management for seamless deployment.
- Deployed **Azure Bot**-based applications connected to model inference endpoints, ensuring stable performance via Azure Front Door and active monitoring tools.
- Contributed to end-to-end model delivery by aligning infrastructure, runtime environments, and deployment pipelines to meet real-time chatbot service requirements. Supported Azure-hosted inference systems for NLP-based chatbots, maintaining high availability, API uptime, and rapid recovery in multi-environment deployments.
- Led a **DevOps team** of 5 engineers across onsite and offshore locations; provided technical guidance, hands-on training, and workflow supervision to ensure smooth execution of all DevOps operations with minimal production disruptions.
- Led **release planning** and coordination for **DevOps-driven deployments**; managed end-to-end release cycles including pipeline readiness, approvals, environment validation, and production cutovers to ensure smooth and timely deliveries.
- Adopted **GitHub Actions** and implemented a reusable shared workflow to automate application deployment, enhancing efficiency in the transition to cloud-native CI/CD tooling.
- Implemented **GitLab CI/CD pipelines with custom runners** to support GitOps-based deployment models, enabling traceable, version-controlled infrastructure and application delivery.
- Developed **Ansible vaults and KP Configs** for secure storage of sensitive data, enhancing **data security and compliance**.
- Worked on creating and updating **ARM templates** and integrated with Jenkins for creation of **Azure services**.
- Worked on **Azure Key vault updates and sync** via Jenkins pipelines.
- Maintained **YAML files** and encrypted sensitive information using **Ansible Vault**, ensuring secure deployment across environments with **Jenkins**.
- Release Branch Creation, Tagging and Merging activities using **Github** as version control system.
- Creating, configuring and Troubleshooting issues with **Builds, Deployments, Smoke Test** for Applications.
- Enhanced and implemented **the rollback** in-case of the deployment failures or smoke test failures to ensure the stability of the environment.
- Regular monitoring activities in **Unix/Linux servers** like Log verification, Server CPU usage, Memory check, Load check, Disk space verification, to ensure the application availability and performance by using **Java melody**.
- Tools Administration includes installing, configuring, upgrading, user & access management, and integration with other tools for Jenkins, JIRA, Confluence & Artifactory.

Sr. DevOps Cloud Engineer

Align Technology – San Jose, CA
May 2016 – Mar 2018

Responsibilities:

- Developed reusable Terraform modules to provision AWS infrastructure (EC2, IAM, VPC) supporting Chef-managed applications; improved infrastructure consistency and reduced provisioning time by 40%.
- Contributed to the continual roll-out of **Chef-based deployment automation** across multiple Test and Production environments, enhancing deployment efficiency.
- Ensured system reliability and performance by managing **MES** maintenance and administration, leading to a 20% reduction in downtime.
- Developed **cookbooks** for automation of MES application deployments, streamlining deployment processes.
- Worked on **WSO2** cookbook and written recipes for automation of User management, roles and subscriptions to APIs at **WSO2 API Store**.
- Contributed on **Ansible playbooks** for deployment of few internal applications onto **heroku**.
- Ensured uptime and resolved issues in Dev, QA, and Production environments, supporting development and deployment infrastructure across more than **1000 servers**.
- Owned observability, incident handling, and reliability automation for cloud-hosted services running on AWS EC2/VPC/IAM with Terraform.
- Configured **Logic Monitor** to enhance system monitoring capabilities, leading to improved detection and resolution of system issues.
- Managed configuration using **Chef, Ruby, and Python**, improving system stability and reducing deployment errors
- Collaborated with the team to migrate **Chef Cookbooks to Ansible**, enhancing automation efficiency.
- Defined, configured, and scripted build, metric, test, deploy, and release steps of deployment pipelines using Jenkins, improving deployment speed and reliability.
- Deployed and maintained applications using **Docker**, ensuring seamless **multi-container operations** and reducing downtime.
- Wrote **CloudFormation templates** and deployed AWS resources,streamlining resource management and improving deployment efficiency.
- Worked on **AWS EC2, IAM, S3, EBS, Elastic Load balancer (ELB),** auto scaling group services.
- Created **Amazon EC2 instances** using command line calls and resolved common instance issues, improving system uptime and performance.
- Deployed applications onto **AWS IIS webservers**, ensuring seamless integration and improved application availability.

- Created cookbooks and deployed using Chef to provision and manage **AWS EC2 instances, volumes, DNS, and S3**, leading to more efficient resource management.
- Developed a cookbook for installation management of **Logic Monitor server**, enhancing monitoring capabilities and system reliability.

DevOps Engineer

Verizon Telematics – Atlanta, GA
Nov 2015 – Apr 2016

Responsibilities:

- Administered **Oracle Fusion Middleware 12c**, ensuring system stability and performance.
- Automated the installation and configuration of **Oracle Database and SOA suite 12c** using **Puppet** Programming, reducing setup time and minimizing errors.
- Automated build and deployment processes using **Docker containers and Puppet**, enhancing deployment efficiency and consistency.
- Set up Docker environments by creating new images and retrieving images from **Docker Hub**, improving build processes and deployment speed.
- Configured **SOA and OSB servers** in **WebLogic Admin server console**, ensuring optimal server performance and reliability.
- Maintained **VMware servers** to ensure optimal performance and reliability, resulting in reduced downtime and improved system efficiency.
- Created **CloudFormation templates and deployed AWS resources**, enhancing infrastructure scalability and efficiency.
- Integrated **JDeveloper** with the **Gerrit** code base, streamlining the code review process.
- Developed Build and Deployment scripts using **Maven** and **Ant** as build tool.
- Automated the build and deploy of **SOA and OSB composites** using Jenkins, leading to faster deployment times and fewer manual errors.
- Created **Jenkins** jobs for **unit and functional testing** scripts that triggered alongside and after build and deploy jobs, enhancing the testing process.
- Managed results in **Jenkins Dashboard** view using Plugin Dashboard View and also added **Sonar Dashboard** view into Jenkins.
- Used Jenkins & Puppet to perform automated CI Builds and Deployments.
- Automated end-to-end processes for build, deployment, and testing on SOA and OSB composites, increasing efficiency and consistency.

Sr. Systems Analyst

HCL Technologies – Chennai, India
Nov 2011 – Apr 2014

Responsibilities:

- Provided IT infrastructure support to HCL's client AstraZeneca by proactively monitoring its IT infrastructure environment, ensuring system stability and performance.
- Monitored servers using tools like Tivoli Enterprise Console, HP Open View, and HP SIM, leading to early detection and resolution of potential issues.
- Monitored and managed batch jobs through AUTOSYS, ensuring timely completion and reducing downtime.
- Created and updated tickets in REMEDY, facilitating efficient issue tracking and resolution.
- Prepared daily reports to provide insights into system performance and support decision-making processes.
- Monitored daily backup status and server backup health using Azure Monitoring, generating daily reports to ensure system reliability.
- Logged into servers remotely to troubleshoot backup failures and resolved tickets, improving system uptime and user satisfaction.
- Logged into TSM Backup servers using Putty to check backup health status, ensuring data integrity and availability.
- Performed Windows patching activities to enhance system security and performance.
- Maintained and updated incident dashboards using JIRA, providing clear visibility into incident trends and resolutions.
- Monitored network and servers for software and hardware failures, ensuring system reliability and minimizing downtime.
- Monitored disk space and processes on servers and workstations using Unix tools, ensuring optimal performance and preventing system overloads.
- Sent daily reports to the manager using Confluence, providing insights into system performance and facilitating informed decision-making.

Network Engineer

Doctus Software Solutions – Hyderabad, India
Aug 2010 – Nov 2011

Responsibilities:

- Installed and maintained the Local Area Network at the workplace, ensuring reliable connectivity and minimizing downtime
- Performed cross platform audits of Active Directory (AD) objects and user permissions.
- Managed User Accounts on Windows NT and UNIX Platform (Creation, Deletion, Permissions, and VPN Access).
- Developed organizational units in Active Directory (AD) and managed user security with group policies.
- Created and maintained email addresses and distribution lists in MS Exchange.
- Compiled data to assist technical writers with IT new hire manuals and prepared data to report to testers for system enhancements.
- Managed user profiles by assigning rights on resources, ensuring secure access and compliance with company policies
- Performed daily, weekly, and monthly backups of all client PCs, ensuring data integrity and availability
- Provided technical support to the entire organization on software and hardware, improving operational efficiency and reducing downtime
- Updated operating systems, antivirus, and service packs, ensuring systems were secure and up-to-date
- Configured and updated firewall settings for users, enhancing network security and user access control
- Installed and upgraded hardware and software, improving system performance and reliability
- Repaired and maintained desktops, ensuring minimal downtime and optimal functionality for users
- Managed company documents using MySQL, ensuring data integrity and easy retrieval for team members

System Admin

World Info Tech – Hyderabad, India
July 2009 – July 2010

Responsibilities:

- Managed user profiles by assigning appropriate rights on resources, ensuring secure and efficient access.
- Performed daily, weekly, and monthly backups of all client PCs, ensuring data integrity and availability
- Provided technical support to the entire organization on software and hardware, improving system reliability and user satisfaction
- Updated operating systems, antivirus, and service packs to maintain system security and performance
- Installed and upgraded hardware and software, ensuring systems were up-to-date and functioning optimally
- Repaired and maintained desktops, ensuring optimal performance and reducing downtime by using diagnostic tools and techniques
- Managed company documents using AWS and CloudFormation, improving document retrieval efficiency and ensuring data security

EDUCATION & PROFESSIONAL QUALIFICATION

Master's in Computer Science
San Francisco Bay University - 2015

Bachelor's in Computer Science Engineering
Jawaharlal Nehru University – 2009

CREDITS & CERTIFICATIONS

Prompt Engineering for ChatGPT
Vanderbilt University
✔ Issued: Jan 2025   (Show credential ☑)

AWS Certified DevOps Engineer – Professional
Amazon Web Services Training and Certification
✔ Issued: June 2025   (Show credential ☑)

MANAGEMENT SKILLS

Team Leadership & Management   **Communication & Collaboration**   **Analytical and Problem-Solving**

Goal Setting	Effective Communication	Data Interpretation
Leadership & Delegation	Cross-functional Collaboration	Decision Making
Performance Management	Relationship Building	Solution Development

Signature

Keerthish Kodaii