**A close-up of a logo

Description automatically generatedKiran Gaddam** [gaddamkiran.cloud@gmail.com](mailto:gaddamkiran.cloud@gmail.com)

**Sr. DevOps & Cloud Engineer (**708) 942-4289

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PROFESSIONAL SUMMARY:

Highly skilled Senior Cloud DevOps Engineer with over 10+ years of hands-on experience and passionate in architecting, automating, and optimizing end-to-end cloud solutions. Proficient in leveraging cutting-edge technologies to streamline development pipelines, enhance system reliability, and ensure seamless deployments. Adept at leading cross-functional teams, implementing robust CI/CD practices, and optimizing cloud infrastructures for high availability, security, and scalability. Expertise includes cloud platforms AWS and Azure, along with proficiency in tools like GitHub, Jenkins, Azure DevOps, GitLab, Terraform, Docker, Kubernetes, Ansible, Python, Prometheus and Grafana.

* Expert in designing, implementing, and managing microservice cloud architectures on AWS and Azure, ensuring scalability, redundancy, and optimal performance.
* Proficient in leveraging cloud-native services and hybrid cloud solutions to meet specific business requirements and enhance operational efficiency.
* Implemented advanced CI/CD pipelines, integrating tools like Jenkins, GitLab CI, Azure DevOps and GitHub Actions to automate build, test, and deployment processes.
* Implemented Infrastructure as Code (IaC) using Terraform and Ansible, ensuring version-controlled, reproducible, and automated cloud resource provisioning.
* Managed Kubernetes clusters for container orchestration, ensuring seamless deployment, scaling, and orchestration of microservices-based applications.
* Proficient in containerization technologies like Docker, enabling the containerization of applications for improved portability and resource utilization.
* Implemented robust security practices, including identity and access management (IAM) policies, network security configurations, and encryption mechanisms, ensuring data protection and regulatory compliance.
* Automated infrastructure provisioning and configuration management using Ansible, ensuring consistency, reliability, and repeatability of deployments across diverse environments.
* Proficient in scripting automation tasks using Python, enabling streamlined workflows, and enhancing efficiency in infrastructure management and deployment processes.
* Implemented monitoring and observability solutions, including Prometheus, Grafana, and ELK stack, to gain deep insights into system performance and facilitate proactive issue resolution.
* Conducted regular security audits, vulnerability assessments, and penetration testing to identify and mitigate security risks in cloud infrastructures.
* Managed cross-functional teams, fostering a collaborative and innovative environment to drive continuous improvement and achieve organizational objectives.
* Mentored team members, facilitated knowledge sharing, and conducted training sessions to enhance technical skills and foster a culture of learning and growth.

Education:

* Master of Science in Computer Science - (2015 - 2016) – California, USA
* Bachelor of Technology in Computer Science - (2006 - 2010) – Hyderabad, India

Technical Skills:

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| Cloud Platforms | AWS, Azure |
| Cloud Services | EC2, Lambda, Elastic Beanstalk, S3, EBS, Aurora, RDS, DynamoDB, Redshift, VPC, ELB, Route 53, CDN, IAM, CloudWatch, CloudTrail, CloudFormation, SNS, SQS, AMI |
| Containers | Docker, Kubernetes, Docker Swarm |
| Continuous Integration | Jenkins, GitLab, GitHub Actions |
| SCM tools | GIT, GitLab, Bit Bucket, Subversion |
| Build tools | Ant, Maven, Gradle |
| Configuration Management | Ansible, Chef, Puppet and SaltStack |
| Scripting languages | Bash, Shell, Ruby, Perl, Python |
| Programming languages | C, C++, Java |
| Databases | Oracle, MS SQL Server, MySQL, PostgreSQL, NoSQL |
| OS | Linux (Red hat, CentOS, Ubuntu), UNIX (HP-UX, Solaris, IBM AIX) and Windows |
| Virtualization | Oracle Virtual Box, VMware, Vagrant |
| Web Application Servers | Nginx, Apache Tomcat, WebLogic, WebSphere, JBOSS, TFS, IIS |
| Monitoring tools | Prometheus, Grafana, Splunk, Nagios, ELK |
| Networking and Communication Protocols | DNS, Router, Load Balancer, Sub netting, VPN, Network ACLs, TCP/IP, HTTP/HTTPS, SSH, FTP, LDAP |
| Methodologies | Agile, Scrum, Kanban, and Waterfall |
| Tracking tools | JIRA, Monday.com, ServiceNow |

**professional Experience**

**SIEMENS Chicago, IL**

Sr. DevOps & Cloud Engineer APRIL 2018 - Present

Responsibilities:

* Accomplished migration of on-premises infrastructure and applications to cloud-based services, aligning with DevOps principles, enhancing flexibility, and optimizing resource utilization for improved productivity.
* Configured and managed AWS services such as VPC, IAM, EBS, Security Groups, Auto Scaling, SES, SNS, Elastic Beanstalk, Lambda, Load Balancing, and RDS all orchestrated using Terraform.
* Responsible for creating IAM and security Group in Public and Private Subnets in VPC.
* Created AWS Security groups which behave as virtual firewalls that control the traffic allowed to reach one or more EC2 instances, managed network security using Load balancer, Auto scaling, and NACLs.
* Worked on S3 versioning and lifecycle policies to backup and Archive files in Glacier and install the AWS command line interface (CLI) to control various AWS services through Shell/Bash Scripting.
* Developed and deployed serverless functions using AWS Lambda, enabling event-driven, scalable, and cost-effective application architectures.
* Worked on functions in Lambda that aggregates the data from incoming events, and then stored result data in AWS DynamoDB.
* Implemented event-driven architectures, triggering Lambda functions in response to events from services like S3 uploads, database changes, or custom application events, ensuring real-time responsiveness.
* Configured and maintained Amazon S3 buckets for scalable and durable object storage.
* Implemented Amazon CloudFront for content delivery, optimizing for low latency and high data transfer speeds.
* Managed Amazon Route 53 for domain registration, DNS routing and traffic management, ensuring reliable and fast domain resolution.
* Configured notifications and alerts using Amazon SNS for real-time communication.
* Successfully migrated mission critical application and workloads from AWS EC2 instances and AWS Lambda to Azure Virtual Machines (VM’s), Azure functions, and Azure app service.
* Developed serverless applications using Azure Functions, enabling seamless event-driven architecture, and optimizing resource utilization.
* Configured Azure DevOps pipelines for CI/CD, automating the deployment process and improving release efficiency.
* Implemented Azure Key Vault for secure storage and management of sensitive information, such as API keys, secrets, and encryption keys.
* Developed infrastructure-as-code solutions using Azure Resource Manager (ARM) templates and Azure PowerShell, enabling repeatable and automated resource deployment.
* Created and managed Azure AD tenants and configured applications with Azure AD and Integrated permission Windows AD with Azure AD.
* Configured and maintained Azure VPN-point to site, Virtual networks, Azure custom security, Endpoint security and firewall. Hands on experience on backup and restore Azure services.
* Developed Terraform scripts (IaC) to provision services such as Aurora clusters, Elastic Search, SQS, Kinesis Streams and many other AWS managed services.
* Implemented microservices architecture using Docker containers, enabling modular, scalable, and independently deployable services for complex applications.
* Proficient in creating and optimizing Docker files, ensuring efficient and lightweight container images by minimizing layers and dependencies.
* Worked on Docker Engine, Docker HUB, and Docker Compose.
* Extensively used Docker, Kubernetes for containerization, virtualization, ship, run and deploy the application securely for fasten Build and Release Engineering.
* Implemented Horizontal Pod Autoscaling (HPA) based on CPU and memory metrics, ensuring applications dynamically scale based on demand, optimizing resource utilization.
* Orchestrated stateful applications using StatefulSets, ensuring stable network identities and persistent storage for stateful workloads such as databases and caching systems.
* Implemented storage classes and persistent volume claims (PVCs) to manage storage resources efficiently, ensuring data persistence for stateful applications.
* Implemented Network Policies to control the flow of traffic between pods, ensuring secure communication and segmentation within the cluster.
* Implemented container security best practices, including image scanning, restricted privileges, and vulnerability management, ensuring secure containerized applications.
* Designed, implemented, and optimized CI/CD pipelines using Jenkins Groovy scripting, enabling automated building, testing, and deployment of applications, resulting in reduced time-to-market and improved release reliability.
* Utilized Groovy scripts to customize Jenkins workflows, enabling seamless integration with various tools and services.
* Implemented artifact management systems such as Nexus, JFrog, ECR and integrated with Jenkins pipelines, ensuring versioned artifact storage and efficient dependency management.
* Integrated security scanning SonarQube into Jenkins pipelines, automating code analysis, vulnerability assessments on every code commit.
* Integrated Jenkins with monitoring and alerting tools such as Prometheus and Grafana, enabling real-time performance monitoring of builds, deployments, and infrastructure, ensuring immediate response to incidents.
* Developed complex Ansible playbooks to orchestrate multi-tier applications, handle configurations, and ensure seamless deployments, reducing manual intervention and minimizing errors.
* Created reusable Ansible roles to modularize configurations and tasks, promoting a maintainable and scalable automation framework for various applications and services.
* Created Ansible modules to match unique application needs. These modules expand Ansible’s capabilities and make it easy to connect with our custom systems.
* Scheduled recurring tasks and automated workflows using Ansible Tower, ensuring timely execution of backups, updates, and other critical operations, enhancing operational efficiency.
* Wrote Lambda functions in Python, ensuring flexibility and compatibility with existing codebases.
* Developed custom scripts and modules in Python for Infrastructure as Code (IaC) tools like Terraform and AWS CloudFormation, ensuring flexible and scalable provisioning of resources.
* Automated the provisioning of cloud resources on platforms like AWS and Azure using Python SDKs, optimizing resource allocation, and reducing manual intervention.
* Created custom tools and utilities in Python to address specific infrastructure challenges, enhance operational capabilities and enable unique solutions tailored to project requirements.
* Utilized Python-based configuration management tools like Ansible for automating infrastructure configuration, ensuring consistent and secure server setups across environments.
* Developed Bash scripts for automated provisioning and configuration of cloud infrastructure resources using tools like AWS CloudFormation, Terraform, or Azure Resource Manager.
* Configured and managed ELK stack, setup the Elastic search ELK Stack to collect, search and analyze log files across the servers. Evaluated system logs using ELK software stack.
* Implemented Prometheus and Grafana dashboards within Helm charts, capturing crucial metrics from Kubernetes clusters and AWS resources, ensuring real-time visibility into system performance.
* Defined custom metrics and Prometheus exporters to monitor application-specific performance metrics, enabling tailored monitoring solutions for diverse microservices.
* Created interactive and visually appealing Grafana dashboards, aggregating Prometheus metrics and AWS CloudWatch data, providing a comprehensive view of cluster and infrastructure health.
* Configured alerting rules in Grafana, integrated with various notification channels such as email, Slack, ensuring timely alerts for critical issues and minimizing response time.
* Experience on Splunk search construction with ability to create well-structured search queries that minimize performance impact.
* Facilitated the Git Flow branching model, defining clear guidelines for feature branches, release branches, hotfixes, and develop branches. Ensured a systematic approach to feature development and release management.
* Installed and configured various middleware packages such as WebLogic, Tomcat and JBOSS servers.
* Hands on experience on JIRA, Monday.com, for creating tickets, storyboarding, pulling reports from dashboards, creating and planning sprints.

**Environment**: AWS (EC2, S3, IAM, VPC, ELB, RDS, EBS, CloudFormation, Lambda, CloudWatch, CloudTrail, Route 53, CDN, SQS, SNS, AMI, CLI, DNS), Azure, Terraform, Ansible, Chef, Git, GitLab, SVN, Jenkins, ANT, Maven, Gradle, Docker, Kubernetes, ELK, Nagios, Prometheus, Grafana, Tomcat, WebLogic, Bash, Shell, Perl, Python, Ruby, RHEL, Jira.

**7- Eleven Irving, TX**

Cloud DevOps Engineer February 2017 – March 2018

Responsibilities:

* Launched, Configured, and automated Elastic Load Balancers (ELB) for Frontend and Backend Servers, Utilized AWS Cloud Watch to monitor the performance environment instances for operational performance metrics during load testing.
* Written Cloud Formation Templates in JSON and YAML format to build the AWS services with the Infrastructure as a Code (IaC).
* Experience with event-driven and scheduled AWS Lambda functions to trigger various AWS resources and worked on Lambda for triggering events with cloud watch using Lambda functions.
* Utilized AWS Elastic Beanstalk for deploying and scaling web applications and services developed with Java, PHP, Node.js, Python, Ruby, and Docker. Abstracted the infrastructure complexities, automating the provisioning of resources and handling server management, allowing seamless deployment on a platform-agnostic environment.
* Extensive experience in Windows Azure (IaaS) migrating like creating Azure VMs, storage accounts, VHDs, storage pools, migrating on premise servers to Azure and creating availability sets in Azure.
* Configured and Implemented Azure Cloud platform such as Virtual Networks Multi-site, Cross-site, VMs, Azure AD, Load Balancers, Azure SQL, and Cloud Services.
* Configured network infrastructure within Azure including storage, load balancing, virtual machines, access control lists, network security groups, and various other Cloud based technologies.
* Designed distributed private cloud system solution using Kubernetes, Docker on CoreOS and used it to deploy, scale, load balance and manage Docker containers with multiple names spaced versions.
* Expertise in using Docker to run and deploy applications in multiple containers like Docker Swarm.
* Wrote Ansible playbooks in YAML to manage configurations, Orchestration, and deployments to remote machines. Provisioned load balancer, auto-scaling group and launch configuration for Microservices using Ansible.
* Extensively used Ruby scripting on Chef Automation for creating cookbooks comprising all resources, data bags, templates, attributes and used Knife commands to manage Nodes.
* Experience on automating the code using Chef and Python to build AWS environments autonomously.
* Integrated Python scripts into CI/CD pipelines, automating build, test, and deployment processes, improving release velocity, and minimizing deployment errors.
* Installed, configured, and administrated Jenkins CI tool on Linux machines along with adding, updating plugins such as GIT, Maven, Gradle, Docker and Ansible.
* Deployed and configured GIT repositories with branching, tagging and notifications. Experience in automation of merging branches as requested by the developers.
* Experience on Splunk search construction with ability to create well-structured search queries that minimize performance impact.
* Installed, configured, and managed the ELK (Elastic Search, Log stash and Kibana) for Log management within EC2 / Elastic Load balancer for Elastic Search.
* Responsible for monitoring the server infrastructure using Nagios, CloudWatch.
* Worked on automating Linux server builds running on Oracle Linux 7.3 both VMs and Physical servers.

**Environment***:* EC2, RDS, S3, IAM, VPC, Cloud Watch, Cloud Trail, SNS, EBS, Route 53, ELB, AMI, Elastic Bean Stack, Lambda, Azure, Terraform, Kubernetes, Docker, Jenkins, Maven, Gradle, Ansible, Puppet, Shell scripting, Python, Linux, WebLogic, WebSphere, MySQL, GIT, Nagios, Jira.

**Change Healthcare Nashville, TN**

DevOps & Aws Engineer September 2014- August 2015

Responsibilities:

* Created and managed EC2 instances utilizing various AWS services like auto-scaling groups, Elastic Load Balancing (ELB), S3 and Glacier for our QA and UAT environments and infrastructure servers for Chef.
* Writing JSON templates for Cloud formation and ruby scripts for chef automation and contributing to our repository on GITHUB (sub version control).
* Configured, maintained Jenkins and Docker for CI and end to end automation of all build and deployments, also have good knowledge on XL deploy and Code Deploy as release automation solution.
* Created Docker images using a Docker file. Worked on Docker container snapshots and managed Docker volumes. Expertise in setting up Docker Host, Docker Registry, RHEL/ Centos Atomic Host, Docker images (Centos, RHEL and Ubuntu instances). Developed Networking policies for Docker containers.
* Installed Chef-Server enterprise On-Premises/WorkStation, bootstrapped the Nodes using Knife and worked with Chef Enterprise Hosted as well as On-Premises.
* Written wrapper scripts to automate deployment of cookbooks on nodes and running the chef client on them in a Chef-Solo environment.
* Experience in code deployment and orchestration with tools such as Chef, Cloud Formation and automated validation using Test Kitchen, Vagrant. Involved in Architect, build and maintain Highly Available secure multi-zone AWS cloud infrastructure utilizing Chef with AWS Cloud Formation templates.
* Created, maintained continuous integration CI using tools Jenkins and Bamboo over different environments to facilitate an agile development process which is automated enabling teams to safely deploy code repeatedly.
* Built Jenkins jobs to create AWS infrastructure from GitHub repos containing terraform code (IaC).
* Worked with NACL, Security Groups, Nagios, encryption, CloudWatch, Multi Factor Authentication etc.
* Installed and Upgraded packages and patches, Configuration management, Version Control, Service packs, troubleshooting connectivity issues and reviewing Security constraints.
* Monitored and managed various DEV, QA, Pre-Prod, PROD environments for production and deployment activities. Identified cross functional dependencies through monitoring and tracking release milestones.
* Expertise with virtualization technologies, installed and configured VMware environments, created Virtual Servers and involved in troubleshooting critical hardware and software issues and user tickets.

**Environment**: EC2, S3, NACL, Security Groups, Docker, Ansible, Chef, Jenkins, Maven, Linux, Shell scripting, Python, GIT, VMware, MySQL, Jira, Nagios, CloudWatch.

**T-Mobile Alpharetta, GA**

Build & Release Engineer March 2013 - August 2014

Responsibilities:

* Participated in the release cycle of the product, which involves environments like Dev, QA, UAT and Prod.
* Installed, Deployed Red Hat Enterprise Linux 6.x, CentOS and installation of packages and patches for Red Hat Linux Servers.
* Well versed with administering and automation using Chef, Puppet and SaltStack for deployment on multiple platforms.
* Automated Linux production server setup using Puppet scripts. Designed and implemented Puppet-based configuration management system for all new Linux machines (physical and virtual).
* Worked on setting up Jenkins’s server for build & test applications and maintained ant build script including build.xml and pom.xml.
* Developed automated processes that run daily to check disk usage and perform cleanup of file systems on LINUX environments using shell scripting.
* Administered and handled configuration management of GIT and source code repositories.
* Administered source tree, user account creation, repo sync, branching, checkout, merging, tag creation, pull, push, fetch, resolving merge-conflicts, commit, snapshots, open-source tools.
* Developed build and deployment scripts using ANT and MAVEN as build tools in Jenkins to move from one environment to other environments.
* Set up Jenkins’s server and build jobs to provide continuous automated builds based on polling the GIT.
* Develop, Maintain, update various script for services (start, stop, restart, recycle, Cron jobs) UNIX based Korn shell, Bash.
* Used Nexus for periodic archiving and storage of the source code for disaster recovery, sharing artifacts and handling dependency management within the company.

**Environment**: Linux, Windows, UNIX, GIT, Jenkins, ANT, Maven, Nexus, Tomcat, Perl, JIRA.

**MERCK & Co Boston, MA**

System/Linux Administrator June 2011 – February 2013

Responsibilities:

* Installed RedHat Linux using Kick start and applied security patches for hardening the server based on the company's policies.
* Managed Disk and File System through Solaris Volume Manager, Logical Volume Manager and Veritas Volume Manager.
* Managed Compaq, Linux workstations and servers. Installed and configured Apache Tomcat web server.
* Wrote UNIX shell scripts for automated installations to extract logs using C, Bash, Perl, and Python.
* Writing Shell scripts for automation of daily tasks, documenting the changes that happen in the environment and in each server, analyzing the error logs, analyzing the User logs, analyzing the /var/log/messages.
* Knowledge of using Routed Protocols like FTP, SFTP, SSH, HTTP, HTTPS and Direct connect.
* Experience with Active Directory, LDAP, Ping Identity, XACML, OAuth, SAML, single sign on (SSO) or related authentication technologies.
* Good understanding of Network topologies such as LAN, WAN, VPN and Firewalls.
* Involved in Linux backup/restore with tar including formatting and disk partitioning.
* Provided release updates to the management team and business leads. Releases were done at feature level and not at individual changes or at file level.
* Administer a Corporate Active Directory 2003/2008 Infrastructure: deploy and configured Group Policies, set up Organizational Units, created and modify user accounts.
* Monitored System Activities like CPU, Memory, and Disk space usage to avoid any performance issues.
* Networking communication skills and protocols such as TCP/IP, Telnet, FTP, NDM, SSH, SNMP, Rlogin.
* Updated systems using RedHat Enterprise Network (RHN), Managing, and monitoring through RHN.
* Worked on installing and configuring VMware/ESX Servers for virtualizations.

**Environment**: Linux (RHEL 4.x/5.x), CentOS, Solari8/9/10, VERITAS Volume Manager, Shell Scripting, VMWARE, Apache Tomcat, WebSphere Application Servers 6.x, Nagios.