Mohan Karthikeyan in

Total Exp: 6 Years

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Address:-Chester – Open for Relocation

Professional Summary:

- Dynamic DevOps professional with over 5+ years of experience specializing in cloud infrastructure, automation, and security in AWS and Azure and on-premises (hybrid) environments.
- Exceptional Skills in Container technologies, AWS ,GCP and Azure Cloud, Linux Administration, CI/CD Integration, working in fast paced Agile Environment.
- Expert in containerization with Docker, orchestrating with Kubernetes, and managing infrastructure as code with a strong focus on Terraform for AWS and other cloud providers.

TECHNICAL SKILLS:

Source Code Management: Github, GitLab	**CI/CD Tool:** GitHub Actions, Azure Devops, Jenkins
Containerization Tool: Docker, Kubernetes, ECS	**Code quality check Tool:** SonarQube
AWS Services: EC2, VPC, IAM, SG, Lambda	**Container Management Tool:** Portainer
IAC Tools: Ansible, Cloud Formation & Terraform	**Scripting Languages:** Bash, Python
Operating System: Windows, Linux (RHEL & Ubuntu)	**Monitoring and Logging:** Grafana, Loki, Prometheus, Cloudwatch
Cloud Platform: AWS, Azure Cloud, GCP	**Networking:** TCP/IP, TLS, DNS, VPN, Load balancer, SSL

WORK EXPERIENCE:

GoRentals –(U.S based)- Remote   Nov 2024 – Present
Designation: Devops Engineer

- Developed 3 tier SaaS infrastructure on AWS Cloud from scratch (dev to production) using terraform.
- Achieved and maintained **99.99%** uptime as per SLA for client ad campaigns using scheduled scaling and infrastructure event management resulting in **15%** increase in successful ad deliveries, overseeing all infrastructure management, and debugging.
- Successfully **optimized costs by $1700** per month through restructuring the lower environment (Dev and UAT), adjusting resource capacities based on utilization, and consolidating resources to enhance infrastructure efficiency.
- Built a bash script to **automate** the reporting process to create a Redshift cluster with two nodes to **reduce the cost by 50%** by eliminating the secondary node from the production cluster permanently and adding it during the script when it's required.
- Enhanced API endpoint connections through effective load balancing and optimized AWS service configurations.
- Created and maintained GitLab (Continuous Integration/Continuous Deployment CI/CD) pipelines for continuous build, testing, and deployment automation for microservices, pulling Docker images from private registries, and deploying them into EKS, for preproduction and production environments.
- Integrated Static Application Security Testing (SAST) using PhpStan into the pipeline to ensure code security and vulnerability detection throughout the development lifecycle. Utilized AWS Security Hub for continuous monitoring and compliance.
- Designed high availability and business continuity solutions using self-healing architectures, fail-over routing policies, multi-AZ deployment of EC2 instances, ELB health checks, Auto Scaling, and other disaster recovery models.
- Optimized developer/Software Engineering team workflow, enhancing scalability, speed, and end-user experience.
- Deployed applications into the AWS Cloud using Amazon EC2, AMI, VPC (Virtual Private Cloud), IAM, AWS S3, lambda, RDS, API, ALB, CloudWatch, and Route53.
- Improved database efficiency by migrating databases from **on-premises** to the cloud, providing support for SQL & NoSQL databases such as MySQL, DynamoDB, PostgreSQL, & MongoDB.
- Implemented robust monitoring and logging solutions using Grafana, enabling proactive system monitoring, issue identification, and performance Optimization.

Project 1: Deployed a multi-tier PHP and MySQL application on AWS EKS with AWS fargate, configuring user access controls RBAC, NFS storage with static volumes, and verifying dependencies. Restricted deployment to different namespaces with maximum quotas. Implemented secrets for sensitive data and configmaps for non-sensitive data. Managed the Kubernetes cluster using kubeadm, kubectl, kubelet, and Docker.

GAVS Technology – India- Remote   Mar 2023 – Oct 2023

Designation: Devops Engineer (1 year Contract)

- Designed and managed cloud-based infrastructure on AWS and leveraging infrastructure as code (Iac) tool as Terraform for automation / Process improvement and scalability.
- Migrated test and production database from EC2 instance to AWS services. (MySQL and MongoDB) and upgrading the existing services to the latest versions.
- Developed and maintained automated CI/CD pipelines using Jenkins, accelerating code deployment by 50% and reducing manual errors by 75%.
- Designed for high availability and business continuity using self-healing-based architectures, fail-over routing policies, multi-AZ deployment of EC2 instances, ELB health checks, Auto Scaling, and other disaster recovery models.
- Implemented security best practices in AWS, including multi-factor authentication, access key rotation, role-based permissions, enforced strong password policies, configured security groups and NACLs, S3 bucket policies etc.
- Built and deployed Docker containers using Kubernetes to break up monolithic apps into microservices, thereby improving developer/Software Engineering team workflow, increasing scalability, and optimizing speed and end-user experience.
- Deployed applications into the AWS Cloud using Amazon EC2, AMI, VPC (Virtual Private Cloud), AWS S3, ALB, CloudWatch, and Route53.

Project 2: Implemented infrastructure automation using Terraform to provision a centralized server for Jenkins, facilitating efficient deployment and management of AWS infrastructure components. Utilized Terraform to launch a VPC, Public and Private subnet along with the EC2 instance, installed Jenkins, Java, and Python on the instance using Ansible, and ensured seamless integration with existing infrastructure. Demonstrated proficiency in Terraform, Ansible, AWS, and key automation tools.

Tata Communications and Transformation of Services Ltd – **Chennai, India**

Designation: DevOps Engineer   *Oct 2021 – Nov 2022*

- Supported 50+ AWS Cloud instances running, Ubuntu and Windows environments.
- Reduced costs by 15% Annually by eliminating unnecessary servers and consolidating databases by utilizing the metrics.
- Automating infrastructure provisioning and configuration using Terraform
- Created Jenkins (Continuous Integration/Continuous Deployment CI/CD) pipelines for continuous build, testing, and deployment by integrating Git, Maven, JUnit, SonarQube, Docker, etc.
- Provisioning S3 buckets and managing policies for S3 and Utilized S3 buckets for backup of terraform state file using dynamo DB.
- Containerized and orchestrated applications using Docker and Kubernetes for java-based applications.
- Configuring monitors, alarms, and notifications for EC2 hosts using cloud-watch.

ACT FIBRENET - Chennai, India

Designation: Network Engineer – Technical Support Engineer   Aug 2017 - June 2021

- Re-engineered the network with the highest fault rate, designing and executing a network plan to rectify identified issues.
- Supervised on-site engineers during network rectification, ensuring timely completion of tasks.

Certifications & Awards:

Certifications-:	Interpersonal Skills:
● AWS Certified- Solution Architect	- Excellent communication skills
● Certified Terraform Associate	- Proven ability to collaborative with others
● CISCO Certified Network Associate – CCNA	- Strong problem-solving skills

Awards-
- **Customer Delight ->** Received for doing multiple POCs and getting good feedback, appreciation from engagements.
- **Hero Of the Cluster ->** Received for good work performance in the project.

EDUCATION:

Master of Business Administration from **University of Chester, UK**   2023 to 2024
Bachelor of Electronics and Communication Engineering from **Anna University, India**   2013 to 2017