ANANTH MAHESH KASHYAP

Cloud DevOps Engineer
Stuttgart, Germany | +49-17660369975 | E-Mail | Linkedin | Portfolio

SUMMARY

A solution-oriented Cloud DevOps Engineer with around 3 years of experience in building and maintaining software architectures. Skilled in automating cloud-native processes, provisioning infrastructure using Terraform, and deploying Kubernetes-based solutions. Proficient in CI/CD pipelines, cloud services, and site reliability engineering, with a strong focus on optimizing workloads for performance and efficiency. Currently pursuing a Master's in Information Technology at the University of Stuttgart.

WORK EXPERIENCE

Master Thesis Student
Bosch Rexroth AG
Dec 2024 - Present
Lohr, Bavaria, Germany

- **Title:** Evaluating Cloud-Native Approaches for a Knowledge Synchronization System: A Comparative Analysis Across Various Cloud Deployment Types.

Cloud DevOps Engineer - Work Study
Bosch Rexroth AG
May 2024 - Oct 2024
Lohr, Bavaria, Germany

- Automated the process of deploying architecture diagrams to confluence with GitHub Actions.
- Developed a CI Pipeline to run Integration tests using GitHub Actions.

Cloud DevOps Engineer - Work Study
ETAS GmbH
Feb 2023 - Apr 2024
Feuerbach, Stuttgart, Germany

- EKS cluster provisioning on AWS using Terraform as IAC.
- Responsible for implementing Karpenter, which is a solution for Cluster Autoscaler in AWS EKS
- Deployment of self-hosted Github Runner in conjunction with an EKS cluster to run workflows.
- Created GHA workflow to run terraform repo's as part of automating CI/CD pipeline.

Site Reliability Engineer
Tata Consultancy Services
Jan 2021 - Sep 2022
Bengaluru, Karnatraka, India

- Migration of Cloud Infrastructure from Cloudformation to Terraform.
- Creating infrastructure alerts using New-Relic.
- Provisioned Servers and deployed features using Puppet.
- Configured the New-Relic Infrastructure & APM for the .NET Application which is hosted on Windows servers.
- AMI Rotation for Windows Servers

EDUCATION

University of Stuttgart
Master of Science in Information Technology (INFOTECH)
Oct 2022 - Present
Stuttgart, Germany

Dr. Ambedkar Institute of Technology
Bachelor of Engineering in Electronics and Communication
Oct 2016 - Oct 2020
Bengaluru, India

PROJECTS

Kubernetes-driven ML Workloads: Metrics for Optimization
Nov 2023 - May 2024
K8s, Kepler, Prometheus

Research Project - University of Stuttgart

- Researched on hardware and software based tools used to measure power consumption of client workloads.
- Elaborate research on Kubernetes Efficient Power Level Exporter (KEPLER) which uses e-BPF and ML models to estimate power consumption at Kubernetes pod/container level.
- Implemented Kepler on GPU accelerated Minikube Kubernetes Cluster having access to NVIDIA GPU.
- Trained CNN and Siamese Network models on the cluster and analyzed power metrics exported by Kepler using Grafana.
- Patterns in power consumption metrics of the ML models were studied in order to decrease the power consumption of the workload.

Cloud Computing Based Gravity Control Security System
Jan 2019 - Jun 2019
Raspberry Pi, Load Cell

Bachelor Project - Dr. Ambedkar Institute of Technology

- Developed a Raspberry Pi-based system to enhance security for valuables in lockers.
- Implemented a load cell to measure weight and detect deviations from a pre-set standard.
- Integrated the Raspberry Pi to process weight changes and send data to a cloud service.
- Designed a notification system to trigger alarms on an Android device.
- Ensured real-time, remote monitoring for detecting unauthorized access or theft.

TECHNICAL SKILLS

Cloud Computing - Amazon Web Services, Microsoft Azure, Kubernetes (Basics), Docker, GitHub Actions, Jenkins (Basics).

Cloud Services - AWS (EC2, EKS, S3, VPC, CloudFormation, Cloud Watch), Azure (Container Apps, Container App Job, Key Vault).

Programming Languages - Terraform (IaC), Python, Microsoft PowerShell, YAML.

Tools - Visual Studio Code, GitHub, Grafana, Minikube, Lens IDE

Operating System - Linux (Ubuntu), Windows.

CERTIFICATIONS

- Infrastructure Automation with Terraform - Udemy
- Microsoft Powershell - Udemy
- Introduction to Programming Using Python - QSpiders
- Deutsch als Fremdsprache A1.1 & A1.2 - University of Stuttgart

LANGUAGES

- Kannada (Mother Tongue)
- English (C1)
- German (A1)