

VAIBHAV MAHAJAN

Boston, MA | 857-693-9723 | i.vaibhavamahajan@gmail.com | [linkedin.com/in/vbhv/](https://www.linkedin.com/in/vbhv/) | github.com/vbhv10/ | vaibhavamahajan.me

EDUCATION

Northeastern University, Boston, MA

Expected May 2024

Master of Science in Information Systems

Related Courses: Advanced Cloud Computing, Programming Structure & Algorithms, Data Management & Database Design

Rajiv Gandhi Proudhyogiki Vishwavidhyalaya, India

Sept 2020

Bachelor of Engineering in Computer Science Engineering

Related Courses: Analysis of Algorithms, Object-Oriented Programming, Data Structures, Machine Learning, Cloud Computing

TECHNICAL SKILLS

Programming Skills : Python, Go, Groovy, Shell, SQL, NoSQL, Django, FastAPI, Flask, Java, C++, JavaScript

Tools & IDE : Git, Ansible, Flyway, IntelliJ, Bash, Postman, JMeter, Airflow, Jenkins, Vault, Airbyte, Gitlab CI, DBT, GitHub Actions, LDAP, Celery, Jira

Cloud & DevOps : Terraform, Jenkins, Packer, Kubernetes Operators, Istio, Nginx, Kubernetes, Docker, Helm Charts, Azure Apache Kafka, AWS (Lambda, SNS, VPC, EC2, RDS, S3, CloudWatch, IAM, KMS, Load Balancer), GCP (Cloud functions, PubSub, GKE, Cloud SQL, Cloud Run, BigQuery, Firestore, IAP, Ingress, Scheduler)

Databases & OS : MongoDB, JSON, PostgreSQL, MySQL, SQLite, Windows, Linux, macOS, DynamoDB, YAML, Redis

CERTIFICATIONS

- Certified Kubernetes Administrator (CKA) (2024): <https://www.credly.com/badges/88d83efa-379c-4a7c-b324-5075aa3a180b>

PROFESSIONAL EXPERIENCE

DevOps Engineer (SRE) | Deqode | Indore, India

Nov 2021 - Aug 2022

- Built the entire process to enter data into Redshift structured with ETL tool Airbyte, made a custom Python connector for it, reducing the number of AWS resources used from 16 to 5
- Implemented Apache Airflow as an orchestration tool to drive whole workflow from spin-up, SSH over instance to trigger reverse ETL script with 20 Python DAG
- Applied data-driven solution by Airflow over an instance with SshOperator, transformed 6 million records using DBT daily
- Deployed 5 MDS subprojects with Terraform & Helm which brought up infrastructure within 10 minutes, GitLab CI over Elastic Kubernetes Service (EKS) & custom VPC, IAP, Ingress using Terraform over cloud technologies
- Optimized functions via PubSub & Task Scheduler, achieving a 30% boost in system responsiveness using caching system.

DevOps/Python Developer | DigiValet | Indore, India

Aug 2020 - Sept 2021

- Proposed & led project in collaboration with the RnD team for server setup, verification & data exchange with an automated setup, reducing time from two days to 10 minutes
- Engineered a data analysis system with Dockerized Application, ELK stack, BigQuery, & Celery on Django for more than 30 clients, including Encore, Armani, Bvlgari, & Address franchises
- Implemented Kong API gateway with OAuth2.0 authentication, load balancing, which improved efficiency by 25% & authorization, featuring Slack alerting, system service logging via Loki, & visualization using Grafana
- Revamped configuration management system service architecture, UI, achieving a 95% reduction in admin tasks with a robust System-lock security & 1-click process Administration
- Designed a robust authentication system backend using Hashicorp Vault, integrated across applications for centralized password, key management, & authentication achieving a 90% reduction in Operational overhead

PROJECTS

Kubernetes DevOps Automation Suite (GKE, Jenkins, Terraform, Python, Node.js): [GitHub](https://github.com/VbhvCloud/)

Sept 2023 - Dec 2023

- Orchestrated end-to-end AWS, GKE, & Kubernetes cloud infrastructure projects with custom AMIs for Jenkins Continuous Integration/Continuous Deployment, automating Deployment of microservices with specific configurations
- Engineered Kubernetes operators in Golang for CRUD on cron jobs for automated health checks & data publication to Kafka
- Integrated cluster Istio service mesh & Kiali dashboard for comprehensive mesh monitoring
- Developed Flask-based web application for CRUD operations on health check data & established Helm chart repositories for streamlined GKE deployments
- Configured Applications with Jenkins & bastion host through SSH tunneling on a private GKE cluster for better security

CloudOps Automator (Django, Terraform, DNS, Packer, CI/CD): <https://github.com/VbhvCloud/>

Jan 2023 - Apr 2023

- Hosted E-Commerce app with Django, Postgres 14, & S3 for image uploads, hosted on EC2 with custom DNS & unit test
- Deployed RESTful API on AWS with Terraform involving S3, RDS & EC2 instances with encryption by KMS, using a custom AMI built with Packer to optimize server setup time, resulting in 50% reduction in deployment time
- Managed application logs on CloudWatch, establishing alerts for 5% CPU usage threshold in application metrics for autoscaling