

VAIBHAV MAHAJAN

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EDUCATION

Northeastern University, Boston, MA

Master of Science in Information Systems, Boston, MA

Relevant Courses: Network Structure & Cloud Computing, Application Engineering & Development

Expected May 2024

3.7 GPA

Rajiv Gandhi Proudhyogiki Vishwavidhyalaya, India

Bachelor of Engineering in Computer Science Engineering

May 2020

8.39 GPA

TECHNICAL SKILLS

- **Programming:** Python, Swift, Shell, SQL, NoSQL, Django, FastAPI, Flask, google-cloud.
- **Technology:** Docker, iOS, Kubernetes, Git, LDAP, GCP(Cloud functions, PubSub, GKE, Cloud SQL, Cloud Run, BigQuery, Celery, Firestore, IAP, Ingress, VPC, Scheduler, Load balancer), AWS(RDS, EC2, S3, KMS, Cloud Watch).
- **Tools and Database:** Airflow, Vault, Airbyte, Terraform, Kong, Gitlab CI, Postman, Superset, Postgres, DBT, MySQL.

PROFESSIONAL EXPERIENCE

Devops Engineer - Deqode, India

Nov 2021 - Aug 2022

- Built entire process to enter data into Bigquery structured with **ETL** tool Airbyte, and a custom Python connector was made for it, reducing number of GCP resources used from 16 to 5.
- Implemented Apache **Airflow** as an orchestration tool to drive whole workflow from spin-up and **ssh** over instance to trigger reverse ETL script with Python DAG.
- Applied Data-driven solution by Airflow over an instance with SshOperator and was transformed using **DBT**.
- Deployed all subprojects of MDS with **Terraform** and helm with Gitlab CI over **Google Kubernetes Engine** and implemented custom VPC, IAP, and Ingress using Terraform over GCP.
- Included terraform to install infrastructure coupled with hashicorp **vault** to store login information.
- Created Cloud Functions to extract, transform and insert data into BigQuery and Gitlab CI for **Ci/Cd** pipeline and terraform to deploy functions and related requirements over GCP, processes 10 gb data daily.
- Managed Functions activated using **PubSub** and cloud scheduler, and **Firestore** was used to keep track of state.

Python Product Engineer - DigiValet, India

Sept 2020 - Oct 2021

DVU (DigiValet Utilities)

- Proposed and Architected a solution for product to transport data between remote servers and verify server's processes and data, cutting setup time for servers from two days manually to 20 minutes automatically.
- Led project with server admin team and modified project with **Django**, Paramiko, Pdkit, SShunnel, and celery modules.

MARS (Modern Analytics and Reporting System)

- Designed a system for analysis of data based on logs, database, and navigation data of iPad on Firebase and exposed some of its APIs to integrate it with 3rd party services and instated it over server with **Docker**.
- Added **ELK** stack, **BigQuery** Library, MariaDB, and leveraged Celery for Cron jobs on Django Framework. Major Clients where MARS is installed are Encore Boston Harbor, Armani, Bvlgari, Raffles, Address franchises.

API Gateway

- Enacted **Kong** API gateway with features OAuth2.0 authentication, load balancer, and Authorization. It has slack alerting with system service and logging over Loki and visualizing with Grafana.

Digivalet Configuration Tool (Cloud and Client), Digimailer

- Modernized System services start, stop, restart, and status functionalities on 1 click depending on configuration in admin panel over server in its Client (on sites) part and built system lock security module to reduce security risk to ease work for server admins.
- Collaborated with iOS team to upgrade product's internal server configurations tool based on Django and docker.
- Re-Engineered DigiValet's own Authenticating, Restricting, and Mailing system and **python** smtplib library.

Software Engineer - Python, EngineerBabu, India

Feb 2020 - May 2020

- Created the Backend of application on Django and worked on Boto3, PyLatex, and DocuSign modules. Worked on API's and security features of application for government of Africa.
- Added APIs for data transmission and session management in DRF.
- Architected a suggestion system for users suggests posts according to preferences.

ACADEMIC PROJECTS

Webapp (django, terraform, DNS, packer, Ci/Cd) : <https://github.com/VbhvCloud/webapp>

- Created a webapp application to expose API of the app and upload images over S3 with Django and Postgres 14 database. Hosted it on ec2 instance with custom DNS.
- Deployed Custom instance image over custom AMI and attached it with autoscaling group and load balancer
- Used Github Actions for Ci and auto deploy the application and configure the credentials of database.