

VISHAL DAMODHARAN

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EDUCATION

Northeastern University, Boston, MA

Master of Science in Computer Systems Engineering, Internet of Things Specialization

May 2021

GPA: 3.54/4

SRM Institute of Science and Technology, Chennai, India

Bachelor of Technology, Electronics and Communication Engineering

May 2018

GPA: 8.3/10

TECHNICAL SKILLS

Programming/Scripting Languages:

Python, Bash, Golang, JavaScript, Java

Protocols:

MQTT, CoAP, HTTPS, HTTP, TCP/IP

Database:

MySQL, PostgreSQL, Oracle, MongoDB

Source Control and Automation Tools:

GitHub, CircleCI, Terraform, Atlassian, Kafka, Jenkins

Container Orchestration:

Kubernetes, Helm, Docker, Kubernetes Operations (kops), AWS ECS

WORK EXPERIENCE

CD Data, Wyoming

Devops Engineer

Jun 2022 - present

- Migrated systems, services like **Jenkins** deployment pipeline server, main application server and all other supporting services from **AWS** to **GCP**
- Upgraded the infrastructure to run in any cloud architecture and not only AWS by moving the infra code to **Terraform** from **CloudFormation**
- Proposed a plan to help reduce company's cloud expenses and executed it by simplifying the system and by performing migration of the architecture

Esper.io Inc, Bellevue, WA

Devops Engineer

Jul 2021 - Jun 2022

- Created a internal data pipeline for aggregation of all the device metrics in a centralized **Redshift** and visualized it in **Quicksight**
- Collaborated with a team of cloud Engineers to design a simulation of a device in **Golang** and managed the automation and deployment of the fleet of devices to communicate and send messages with the dashboard
- Worked on the architecture and infra for deployment of an over-the-air update system for the company managed OS in **GCP**
- Created a streaming service to stream files and app from **S3** with static IP address using **Global Accelerator**, **ALB** and **EC2**
- Organized my work using **JIRA**, held daily meeting to communicate progress with manager and feedback using slack and zoom

Open Water Accelerator, Menlo Park, CA

Software Engineer

Sep 2020 - Dec 2020

- Created a Python/Flask based web application for data processing to extract/scrap some data for financial representation
- Devised infrastructure using **CloudFormation** in AWS to create a EC2 server to run applications and maintain them
- Organized work using **JIRA**, held daily meeting to communicate progress with manager and feedback using discord and zoom

PROJECTS

Microservices over Kubernetes

Sept 2020

- Automated Infrastructure using **Terraform** to setup and destroy A) **Jenkins** Server (CICD pipeline to build, push linux images to ECR) B) **Kubernetes** Cluster using kops
- Orchestrated highly available and reliable applications using helm charts including **Kafka**, Metrics Stack - **Prometheus**, **Grafana** and Logging Stack - ELK (**ElasticSearch**, **Logstash**, **Kibana**)

AWS Deployment Architecture

Feb 2020

- Developed a 3 tier Auto-scalable web application running on **AWS EC2** implementing IaaS, PaaS and SaaS services
- Implemented **load balancer** to distribute traffic from user request to various servers, **auto scaling group** to increase the scalability of the application and **security groups** to manage the network traffic.
- Automated app with **CI / CD** using **GitHub**, **CircleCI** and **Amazon CodeDeploy** to update code without interruption,

CERTIFICATIONS

Certified Kubernetes Application Developer

Jun 2023 - Jun 2026