# Mourya Sai Charan Reddy Kypa

#### **EDUCATION**

Texas Tech University, United States

Aug 2022 – May 2024

Master's in Computer Science

GPA: 3.75

Coursework: Analysis of Algorithms, Advanced Operating Systems, Network Security, Computer Architecture & Organization

Sathyabama Institute of Science and Technology, India

July 2016 - May 2020

Bachelor's in Computer Science and Engineering

CGPA: 9.26

Coursework: Cloud Computing, Python Programming, Data Structures, Database Management System, Computer Networks

#### TECHNICAL SKILLS \_

Programming: Python, Golang, Java, C, Data Structures and Algorithms (Concepts), Linux (Shell/Bash scripting)

DevOps tools : Docker, Kubernetes, Ansible, Terraform, Jenkins CICD, Chef, Puppet, Kafka

Cloud Services : AWS - EC2, S3, IAM, ELB, CodePipeline, CloudFormation, EKS, CloudWatch, Azure Fundamentals

Database : Structured Query Language (SQL), MongoDB

QA Tools : Selenium, Cucumber BDD framework, Karate, TestNG, JUnit, Maven, Gradle

Methodologies : Agile - Scrum, Kanban, XP (Extreme Programming), Waterfall model

Monitoring Tools : Prometheus, Grafana, Kibana

Tools : Nexus, JFrog Artifactory, Git, GitHub, Jira, Slack, IntelliJ, Eclipse, VSCode, Word, Excel, Powerpoint
Certifications : AWS Certified Solutions Architect - Associate (Badge), AWS Certified Cloud Practitioner (Badge)

## WORK EXPERIENCE

# Texas Tech University, Texas, United States

#### **Graduate Student Assistant - Operations Division**

August 2022 - Present

- Supported Transportation and Parking Services management with technical expertise, achieving 80% improvement.
- Used Postman to test APIs, successfully resolving 90% of issues in the department's web application.
- Collaborated with the team to leverage Python for scripting and tool development, effectively addressing departmental needs.

## Informatica Business Solutions Pvt Ltd., Bangalore, India

#### **Software Engineer**

April 2021 – July 2022

- Collaborated with cross-functional teams to implement a Jenkins CI/CD pipeline, Git, and AWS CloudFormation, facilitating testing, integration, and continuous deployment, reducing manual errors by over 80%.
- Automated testing in Informatica products using Selenium, leading to a code coverage increase of over 90%.
- By using Prometheus & Grafana for application performance monitoring, incident response time was reduced by 40%.
- Managed critical AWS services, including EC2 instances, S3 buckets and Data Pipelines, for multiple microservices.
- Possess in-depth knowledge of Azure cloud infrastructure and services, covering Virtual Machines, Storage, Networking, and Security.

#### **Associate Software Engineer**

January 2020 - March 2021

- Assisted in the implementation of Infrastructure as Code (IaC) using **Terraform** to provision and manage the AWS resources, reducing deployment time by 50%.
- APIs were rigorously tested using Postman and Swagger, resolving 90% of the encountered issues.
- Assisted in setting up local dev environments with **Docker** and managed application deployments on **K8s** clusters using **Helm** charts and **kubectl** commands and achieved a 50% decrease in deployment errors enhancing overall development efficiency.
- Supported **Agile/Scrum** methodologies, participating in daily stand-ups, sprint planning, and retrospectives, fostering effective communication and iterative development within the team.
- Implemented multiple conditional-based **shell scripts** within **Jenkins** to track various activities, including process errors, and module-based application health checks, as part of the CI/CD pipeline.

# PROJECTS

## Netflix Clone CI/CD pipeline with Monitoring and Alerting (GitHub)

October 2023

Orchestrated the deployment of a feature-rich Netflix clone application into a **Kubernetes** cluster, replicating the original platform's functionalities using various DevOps tools.

# Deployed a Containerized web application on Amazon EKS (GitHub)

December 202

A Web application was packaged and deployed using a **Docker** container image, utilizing Git for version control, **Maven** for effective builds, and Jenkins for smooth CI/CD. This controlled replication and automated pod recovery to guarantee high availability on **Amazon EKS**.

#### Skills Recommender (GitHub)

October 202:

Leveraged Python's Beautiful Soup module to perform web scraping of trending IT job skills from 2 websites for informed career decisions.