# Mamatha B S

### PROFESSIONAL EXPERIENCE

### **APPONIX ACADEMY**

**Cloud Computing and DevOps tools Trainee** 

Bengaluru, Karnataka Feb, 2025 – May, 2025

- Designed and deployed AWS infrastructure using EC2, S3, IAM, CloudFormation, and Auto Scaling, enabling high availability and scalability for test workloads.
- Automated project deployment pipelines with Jenkins, integrating Git, Maven, and EC2, reducing manual build efforts by 60%.
- Configured and monitored logs via CloudTrail and CloudWatch, improving debugging efficiency and ensuring system audit compliance.
- Implemented S3 Versioning and Cross-Region Replication (CRR) to enhance data durability and disaster recovery strategy.
- Created and managed VPC with custom subnets, internet gateways, and route tables, enabling secure
  and isolated cloud networking.
- Managed user permissions and policies with IAM roles and groups, improving security and least privilege access.
- Configured SNS and SQS to decouple services and enable asynchronous communication between distributed components.
- Built serverless workflows using Lambda functions integrated with API Gateway, reducing cost and increasing execution efficiency.
- Performed backups and volume snapshots using EBS, supporting data recovery and storage optimization strategies.

#### **TERAGON**

Data Science and python Programming and Analytical Tool

Oct, 2023 - Nov, 2024

- Developed Python scripts for data preprocessing and visualization, enabling accurate pattern detection and data insights across structured datasets.
- Designed and deployed interactive dashboards in Tableau, supporting real-time business decisionmaking through data-driven storytelling.

#### **EDUCATION**

Government Engineering college Mosalehosahalli (GECM), Hassan

2021-2025

Bachelor of Engineering, Electronics and Communication – 9 CGPA,

Shree Siddaganga PU College for Women's, Tumkur

2019-2021

#### **TECHNICAL SKILLS**

#### Linux

Booting process, IP configuration, Virtualization, File system Hierarchy (FSH), File Permission, Hard link and soft link, SSH, Cronjob, Ana cronjob, SCP, Pipes and Filter, achieves,

### Cloud Computing (AWS)

EC2, S3 (Versioning, Cross-Region Replication), EBS, VPC, IAM, Lambda, CloudFormation, CloudTrail, CloudWatch, Auto Scaling, Load Balancer, Route 53, SQS, SNS, DynamoDB

### • DevOps Tools:

Git, GitHub, Jenkins, Docker, Kubernetes, Ansible, Prometheus and Grafana

### • Programming Language

Python

### **PROJECTS**

## Shell script that lists AWS resources:

- Developed a shell script to automate the discovery and listing of AWS resources (S3 buckets, EC2 instances, Lambda functions, and IAM users) across the account.
- Integrated AWS CLI commands within the script to fetch real-time metadata such as instance details, public/private IPs, security groups, S3 bucket names, IAM user details, and Lambda configurations.
- Implemented structured JSON parsing and formatted output for clear reporting of resource usage.

# Musical Instrument Classification Based on Sounds - Python, MFCC, VGG 16

- Extracted audio features from sound signals using MFCC, Chroma, and Spectral Contrast.
- Trained classification models (SVM, Random Forest, KNN) to detect and identify musical instruments with high accuracy.

# Blood group Detection Using LED - Embedded Systems, Optical Sensors, Circuit Design

- Designed a low-cost system to detect blood groups using LED light and photodiode-based sensing.
- Built hardware circuit to analyses agglutination patterns and identify blood types in real-time.

#### ADDITIONAL INFORMATION

- Competitions: State level volleyball player
- Certifications: Cloud computing and DevOps tools completion
- Languages: English (Professional), Kannada (Native)
- **Interests:** Reading **50+** books, writing poem, Cricket, Volleyball, Fitness.
- **AIDSO Organization:** to build good society, to save public education, to solve the problem related to the student