# Aisha Siddiqui

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**SKILLS** 

Languages Python, C++, Java, SQL, Node.js, R, Golang

Frameworks PyTorch, Tensoflow, Keras

Technical skills Spark, Kafka, Airflow, Cassandra, PostGreSQL, DynamoDB, Docker, Kubernetes, Deep Learning, BigQuery

ML, ETL, MLflow, Kubeflow, AWS, GCP, Terraform, Jenkins, Ansible

### **TECHNICAL EXPERIENCE**

MLOps Engineer March 2022 - Present

Virufy

- Refactored standardizing and preprocessing scripts with Spark to scale up from handling audio cough datasets containing a few hundred data points to handling millions of data points.
- Proposed and designed a distributed solution, employing Kafka and Spark on AWS EKS, for a scalable live COVID-19 data ETL pipeline.
- Directed and implemented deployment of ingestion pipeline on AWS infrastructure.
- Collaborated with the machine learning team and other MLOps subteams to build a CI/CD pipeline to integrate data ingestion with downstream automated machine learning pipelines.

### **Backend Software and Analytics Intern**

October 2020 - February 2021

Hydrus.AI

- Wrote event-driven serverless functions to perform CRUD operations on a document-based ledger database in response to new customer data.
- Built back-end authenticated GraphQL APIs for calling lambda functions related to database operations using AWS AppSync, ensuring that client company data would remain privately accessible to their owner.
- Designed schema for storing complex and nested data from ESG employee report surveys.
- Produced data analysis functions for populating front-end ESG metric visualizations.
- Conceptualized machine learning pipeline for an NLP model to detect green-washing for a product proposal to enterprise clients.
- Wrote data analysis functions that return data for data visualizations on a front-end ESG metrics dashboard.

### **PROJECTS**

### **Machine Learning Platform on Kubernetes**

December 2022

- Built Docker images and Kubernetes deployments for running Airflow orchestrated Spark jobs for model and pipeline development and deployment.
- Deployed platform deployments on Terraform provisioned GKE clusters with autoscaling.

### **Turbofan Engine RUL Prognostics Modeling**

September 2021

- Investigated and analyzed C-MAPPS dataset for historical time series turbofan engine sensor readings from the C-MAPPS dataset.
- Tuned and Tested a Keras LSTM model for predicting turbofan engine prognostics based on the C-MAPPS dataset.
- Built REST API for model inference end point using FastAPI.
- Configured an ElastiCache server for deploying the dockerized inference app.

### **Distributed Graph Neural Networks**

December 2020

- Coded multi-GPU implentations of SOTA graph neural network algorithms using PyTorch Geometric and PyTorch distributed data parallel libraries.
- Trained distributed GNN models on large fraud detection graph datasets via Slurm jobs on a UMIAC HPC cluster.

### **Mask Detection and Classification**

May 2021

- Researched SOTA computer vision models for object detection and semantic segmentation for mask detection task.
- Coordinated implementation of YOLOv3 with darknet-53 architecture for mask detection task.
- Fine-tuned hyperparameters of mask detection model and performed data augmentation on dataset to improve model performance on a Kaggle face mask dataset.

### **EDUCATION**

Bachelor of Science in Computer Science - Machine Learning, University of Maryland, College Park FourthBrain Machine Learning Engineering Bootcamp

August 2021

May — September 2021

**ACTIVITIES** 

# Aisha Siddiqui

• Ashburn, VA, US

### **Contact Information**

- ltn-2a8-thi@mail.dice.com
- 7038510789

# **Summary**

Senior in Computer Science with Machine Learning Specialization at UMD. Familiar with software development and MLAI algorithms.

## **Work History**

**Total Work Experience: 5 years** 

- Machine Learning And Mlops Engineer Virufy Feb 01, 2022
- Backend Software Developer/Analytics & ML Hydrus.Ai
  Oct 01, 2020
- Frontend Developer Myedmasters Aug 01, 2019

## **Education**

• Bachelors | University of Maryland

## **Skills**

• kubernetes - 1 years

- terraform 1 years
- amazon s3
- amazon web services
- aws lambda
- aws sagemaker
- C
- CSS
- data analysis
- data science
- html5
- java
- machine learning
- pytorch
- software development
- sql
- statistical data analysis
- tensorflow
- apache kafka 1 years
- deep learning 3 years
- python 3 years
- apache spark 1 years
- c++ 1 years

## **Work Preferences**

- Desired Work Settings: No Preference
- Likely to Switch: False
- Willing to Relocate: True
- Travel Preference: 0%
- Preferred Location:
  - o Seattle, WA, US
  - o Mountain View, CA, US
  - o Boulder, CO, US
- Work Authorization:
  - $\circ$  US
- Work Documents:
  - o US Citizen
- Security Clearance: False
- Third Party: False
- Employment Type:
  - o Full-time
  - o Contract Independent

- o Contract W2
- o Contract to Hire Corp-to-Corp
- o Contract to Hire Independent
- o Contract to Hire W2

# **Profile Sources**

- linkedin: https://linkedin.com/in/aisha-siddiqui-1100
- Dice:

https://www.dice.com/employer/talent/profile/504538ef3bf5ed29d1ec9b801b6e7a11