

MACHINE LEARNING ENGINEER

#### **Details**

Mumbai

India

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#### Links

Linkedin

Github

Kaggle

Stack Overflow

# Languages

**English** 

Hindi

# Skills

Python

Deep Learning

Tensorflow

Git

HTML

C++

Machine Learning

Docker

Google Cloud Platform

AWS

**SQL** 

**CUDA** 

Django

Flask

Pytorch

JavaScript

Vue.js

**Pandas** 

As a machine learning engineer, I am passionate about using my skills and knowledge to develop solutions to real-world problems and make a positive impact on society

#### Education

Bachelor of Engineering Information Technology, Fr. Conceicao Rodrigues College of Engineering, Mumbai

2017 - 2021

CGPA: 8.17

# **Employment History**

Machine Learning Engineer, Quantiphi, Mumbai

NOVEMBER 2021 - PRESENT

- Developed scripts to deploy cloud models in multiple regions across the world. Utilized multi-threading to reduce the time taken by 60% for deploying multiple models.
- Worked with a client to develop multiple models for an IoT-based device to handle 5 Million monthly predictions. Trained edge-based models and optimized them using TFlite and ONNX to decrease latency and model size for edge-based devices.
- Developed scripts that used image processing and computer vision algorithms
  to automatically identify and classify images based on their quality and
  similarity. The scripts implemented algorithms to detect bad images, such as
  those with low resolution, blurriness, or noise, and to group similar images into
  classes. This solution reduced the manual effort and time required to create
  and curate a large dataset of images. The resulting dataset was more reliable
  and consistent, and it facilitated downstream tasks such as training machine
  learning models or performing data analysis.

# **Internships**

## Machine Learning Engineer Intern, Quantiphi, Mumbai

- Developed models to recognize movie genres using their summaries.
   Implemented a wide range of models which included LSTM networks and transformers. Deployed the solution on the cloud using TensorFlow serving to allow a seamless integration into client-side apps.
- Worked on integrating CNN-based architectures to increase performance on datasets. Experimented with hyper-parameter tuning using OPTUNA and Keras tuner to help improve performance. Used TensorRT to decrease inference time by models.

 $Image\ Processing\ and\ Computer\ Vision\ Intern\ ,\ Yozo\ Technologies,\ Mumbai$ 

FEBRUARY 2020 - MAY 2020

Worked on developing a solution to extract documents and visiting cards in an image and extract valuable information to help clients gain insights and customer details. The solution used a variety of computer vision, NER, and NLP, techniques, and a REST API back-end was created to integrate the solution with the application.

# **Projects**

Edge based AI video surveillance

Working on a fully automated system for video surveillance. Created edge models for action recognition, object detection, face verification. Data from the cameras is then transferred using a REST- API built using Django.

https://devfolio.co/projects/rimai-research-in-motion-be2f

#### Movie genre prediction using summaries

Trained a BERT based model to take in movie summaries and output the genres of the movie. Used the hugging face library to train a BERT model. Used tensorflow serving to optimize deployment.

#### **Farm Easy**

Developed for empowering and helping farmers it included a Video calling service, Aadhar Card Verification for the farmers registration, A marketplace for the sale of agricultural supplies, Qr code for accessing any inventory details within the warehouse, Statistics of warehouse stock, Tracking delivery/ driver status using GeoLocation , Websockets support for streaming sensor data. <a href="https://devfolio.co/submissions/farm-easy-df91">https://devfolio.co/submissions/farm-easy-df91</a>

#### Courses

Deep Learning Specialization, Coursera

Google Cloud Associate Certification, Google Cloud Platform

Tensorflow in Practice, Convolution Neural Networks, Coursera

Fundamentals of CUDA Computing using NUMBA, NVIDIA

# EXTRA-CURRICULAR ACTIVITIES AND ACHIEVEMENTS

# 1st place in CRESENDO

1st Place at a hackathon conducted by Fr.CRCE,Bandra developed a Tourism based application using Django and vue.js integrated with Google maps street view and sentiment analysis for comment filtering. <a href="https://github.com/sujitnoronha/cresendo">https://github.com/sujitnoronha/cresendo</a>

#### 2nd place at HACK-A-SOL

Developed a system for helping Blood Donation volunteers to seamlessly find the nearest Donation camp. Created a Geo-location based filtering API using geopy to sort the distances and display them on a map using google maps API. Also included scheduling algorithm to select the best time slot for the donor and X-ray detection of COVID-19 to ensure the safety of the blood donors. https://github.com/sujitnoronha/hack\_a\_sol\_2021

### 2nd place at InnovateNSUT

Created an application for handling vaccinations in India. Integrated various features such as Geo-Location, push- notifications, anomaly detection, Qr code based entry system, Distance filtering API's, Web Sockets etc. <a href="https://devfolio.co/submissions/staysafe-connect-1035">https://devfolio.co/submissions/staysafe-connect-1035</a>

#### Finalist at Hackverse 2.0

Winner of the best Begineer Hack at a National level hackathon organized by NIT-Suratkal. Created a deep learning based surveillance system. https://devfolio.co/submissions/rimai-research-in-motion-be2f