Vishak Bharadwaj

Machine Learning Engineer

Data Scientist with a flair for coding, a demonstrated history of mathematical intuition and comfortable with a steep learning curve. Skilled in Python,Data Science, Deep Learning and Machine learning solutions. Looking for challenging and rewarding work environments.

Work History

2021-02 - Current

Machine Learning Engineer

Censius.ai, Bangalore, India

- Built deployment, explainability and monitoring modules using Shap, Lime and Seldon Alibi to explain model predictions and provide insight into why models provide the predictions it did. Logged and monitored them using MLflow WhyLogs and Grafana.
- Created drift prediction APIs during deployment for continous monitoring of performance and monitoring of prodction data.
- Containerized and deployed using docker, Gitlab CI/CD, Monitored data,concept drift with custom code,whylogs
- created data qaulity,drift and performance monitors running on prefect/airflow jobs

2019-11 - 2020-12

Jr Machine Learning Engineer

Omni-Eye/The Valley Edutech, Bangalore, Karnataka

- Built models for security systems for the platform **Omni-Eye**
- **Eye In the Sky : Real-time Image Processing :** uses stacked deep learning models to process images for (among other things),object detection, facial recognition and plate detection.
- MTCNN network for facial detection and finetuned models in pytorch,for the facial recognition aspect.
- Tracked project progress with MLflow
- OCR and other data pipelines were used for object detection and plate recognition.
- **Image Search and clustering :** Created, trained and finetuned a CNN autoencoder, that converts unlabelled images into a feature vector, for reconstruction of the image(down to a loss of 0.002496)

Contact

Address

Bengaluru, KA, 560079

Phone

948 362 8282

E-mail

vishak.svec@gmail.com

LinkedIn

linkedin.com/in /vishakbharadwaj

Skills

Machine Learning

Deep Learning

Data Science

Image Processing

Coding and development

Natural Language Processing

Software

Python

Pytorch

Tensorflow

Sklearn

Pandas

Numpy

Matplotlb

- Then inserted into a KNN algorithm to find similar images, and into unsupervised clustering algorithms to groups out of the image data.
- **Voice Assistant :** An audio-to-text voice assistant that responds to a wake-word and provides a text result. Built on an acoustic model that converts audio to text via a finetuned language model and a rescoring algorithm (discontinued due to covid)

2018-07 - 2019-10

Software Developer/Instructor

The Valley Edutech , Bangalore, Karnataka

- Developed a portal for tracking student progressusing Flask/MongoDB/HTML/CSS.
- Developed APIs to track github commits for a batch of students, for progress tracking.
- Was instructor to multiple Python/Machine Learning/Deep Learning batches from a code first perspective with a practical project oriented approach.

Education

2012-05 - 2016-05

B.E: Mechanical Engineering

B M S College Of Engineering - Bangalore

Certifications

Andrew Ng's Deep Learning Specialization by deeplearning.ai on Coursera

Projects

- **BlueBook For Bulldozers**(kaggle) : Used a Random Forest Regressor to create a model with a RMSLE of 0.2214,Achieved 2nd lowest error(out of 476 teams) on the competition
- **Rossmann Store Sales Prediction** (Kaggle) : Using a Deep Network of Embedding layers to achieve 10% RMSPE and achieved 11th place of more than 3000 teams
- **Trigger Word Detection** : constructed a speech dataset and implemented an algorithm for trigger-word detection(pydub,tensorflow)

MLflow

Docker