Rahul Mangalampalli

Computer Vision Engineer

Hyderbad, India
7218905029 · rahul_mangalampalli@yahoo.in

LinkedIn

Skills

Linux

MySQL

Git

Detectron2

Keras

Tensorflow

OpenCV

C++

Python

Scikit Learn, Scipy, Pandas

CUDA

AWS, GCP

Docker

Languages

English

Hindi

Telugu

Marathi

Profile

I have a keen interest in research in AI with a blend of machine learning into it. I have been playing around in this field for 2 years now. Love for this has gone out of bounds and I literally breathe frameworks like Pytorch, Tensorflow and Caffe(Just Kidding..LOL).

Skills that you'll find amazing:

- I have in-depth knowledge of recent and state-of-the-art models in CNNs(self-supervised and fully-supervised) and NNs. I know how to tune hyperparameters like learning rates, batch-sizes, loss functions, weight decays, momentum, lr decays , steps and etc.

- I know how to design models for classification and detection from scratch.

- I know how to write code in C++ for inference on edge devices.

- I know how to prune and convert model architectures into lightweight frameworks(like TFLite and Caffe).

- I have an extensive knowledge on, when and where to use GANs and how to manipulate them to get what is needed.

- I can wear both hats, as a team player or as a team leader. Flexible with any role.

Employment History

Vision Engineer, IOTIOT.in, Pune

October 2019 —

CNN based projects:

- Trained multiple state-of-the-art models in Pytorch,

Caffe, Tensorflow with peculiar datasets. Achieved a

uptill 80%-90% accuracy on every model.

- Researched and designed a pipeline to train StyleGAN that uses neural

style transfer to generate artificial images in the same

probability distribution of a certain dataset. Trained

a lightweight model on these artificially

generated images that gave an accuracy between 93%-96%

Hobbies

Editing videos, Cooking, Trekking and Traveling

- Converted teachable machine's MobileNetV2 model into Caffe. Designed a C++ API with OpenCV for using the teachable machine on Raspberry Pi with armv8 architecture.
- Added improvised average pooling layer to Caffe framework.
- Trained and deployed MobileNetSSD for detecting professional ID cards which are not easily visible.

OpenCV based projects:

- Designed End-to-End application to detect cellular organsims in an image using improvised hybrids methods based on Watershed Algorithm
- Designed a method to detect number plates and the characters present in it using a k-mean color clustering method.
- Designed a method to detect aadhar cards and pan cards using template matching and contrastive background manipulation techniques.

ML Intern, AI Tech Systems, Pune

July 2019 — September 2019

- Used multinomial regression method to predict house prices.
- Used mix of methods like Naive Bayes, KNN, Random forest, XGBoost , AdaBoost Ensembling to predict credit card fraud and potential customers for a cellular services company.

Education

BE Information Technology, D Y Patil College of Engineering, Pune

August 2016 — June 2020

Graduated with a First Class and Distinction

Research Publication

Stock Price Predictions using hybrid ARIMA and GRU models

Link:

https://www.ijert.org/stock-prediction-using-hybrid-arima-and-gru-models

Courses

Deep Learning using Tensorflow, IBM

February 2020 — April 2020

Deep Learning Essential, IBM

February 2020 — April 2022

Machine Learning with Python , IBM

November 2019 — January 2021

Applied Data Science with Python, IBM

November 2019 — January 2020

Extra-curricular activities

DYPCOE Genius 2nd Rank, DY Patil Collge of Egineering, Pune

October 2019 — October 2019

Coding competition held at the regional level, I stood in top 2 out of approx.1000 people who participated in the competition

Neurolabs Hackathon 3rd Rank, University of Edinburgh, Online

February 2021 — February 2021

Trained a model on synthetically generated data, that achieved around 40% mAP. The competition was held globally, stood 3rd from a pool of 25 international groups.

Additional Links

Github

https://github.com/rahulmangalampalli

HackerRank

https://www.hackerrank.com/rahul_mangalamp1