RAGHAV PRABHAKAR

Pre-Final Student at Thapar Institute of Engineering and Technology

@ raghavprabhakar66@gmail.com Jammu, Jammu and Kashmir - India https://www.linkedin.com/in/raghav-prabhakar/
raghavprabhakar66.github.io RaghavPrabhakar66

EXPERIENCE

Junior Machine Learning Engineer - Omdena AI

June 2021 – Present

- Research and development of assistive technologies for people who are blind, we will assist people with visual impairment in their experience of catching a bus.
- Working with team on creating, labeling and storing data at scale.
- Deployed object detection models on Android.

Core Member (ML Team) - Developer Student Chapter(DSC),TIET

July 2020 – Present

- Making a Pseudo Lidar With Cameras and Deep Learning. Lidars are great for depth estimation, but cameras are not. Depth estimation is one of the most important things for self driving cars, AR, VR, and many more applications. In this project we explore deep learning approaches for 3D reconstruction from monocular images.
- Deep Learning Based Behavioral Cloning for Self Driving Car Created and trained several different deep learning models for behavioral Cloning.
- Lane Segmentation: Trained U-Net and ResU-Net for lane segmentation that can detect lanes from front-facing RGB Images irrespective of day/night. Also tried classical Computer Vision Techniques.

Thapar Satellite Development Center (ThapSat)

Januray 2020 – February 2020

- ThapSat aims to design and develop Nano-Satellite capable of monitoring the environmental greenhouse gases present in the Punjab region. The primary objective of this satellite will be to study absorption spectra of the North Region contributing towards the Greenhouse Effect.

TECHNICAL SKILLS

- Python, Java, Pytorch, Keras, OpenCV
- Machine Learning, Deep Learning, Computer Vision
- Arduino, Raspberry Pi, Linux

ACHIEVEMENTS

- Shortlisted for Final round of National Hackathon (NITJ).
- 2nd Runner Up in INTACH Heritage Quiz.
- State level TT player under 16 age group.

EDUCATION

B.Tech. (COE) - 9.2 CGPA

Thapar Institue of Engineering & Technology

August 2019 – Currently

Higher Secondary - 92%

Central Board of Secondary Education

2019

Secondary - 10.0 CGPA

Central Board of Secondary Education

2017

PROJECTS

Nucleus Segmentation From 2D Scans

- This project was an implementation of U-Net from scratch in the Bio-Imaging sector.It was also part of the Kaggle Data Science Bowl 2019. A model with accuracy of 94.3% was made to detect cells and nucleus from scans.

Painter For Noobs

- It is a website which lets you transform an image into an artstyle. It is based on Neural Style Translation. It was deployed on Web using Streamlit.

Image Captioning

- It is Deep Learning based project in which a CNN-LSTM based model was trained on Flickr30k to summarize images into captions using Pytorch.

Face Detection and Keypoint Estimation

- It is Deep Learning based project in which a CNN-LSTM based model was trained on Flickr30k to summarize images into captions using Pytorch.

AutoEverything

- It is an energy conservation project based on Image Processing and arduino. The goal was to reduce the electric consumption by automatically switching off electric appliances.