

Akhil S

Senior Research Engineer
Hyundai Mobis
Hyderabad
Ph : 9538386488

PERSONAL PROFILE

A research-oriented individual keen on developing a career as a developer for Computer vision/Natural language based applications. Self-initiation and curiosity for learning math and programming -> 2 driving forces of my career

SKILLS

Digital Image Processing
OpenCV
Python
Pytorch
Tensorflow
C Programming
C++
Nvidia Jetson Nano
Linux
GUI Development

EXPERIENCE

Hyundai Mobis

2017 - Present

Implemented a personal project to test cluster units based on design requirements.

1. Used opencv to process input images and detect information presented on the Cluster units.
2. Used Hough transform for Line detection for detecting speedometer reading

Personal Projects

2020 - Present

1.)Facial Keypoint Detection on YouTube faces dataset : Used a 5 layer custom vanilla CNN and learned the basics of creating a deep learning model in Pytorch. Implemented regularization techniques to improve accuracy

2.) Image similarity measurement using Resnet:
Created a custom ONNX operator in CPP to perform repeated interleave operation on tensors. These tensors were extracted from pre-trained Resnet-18 network layers. The interleave ONNX operator was exported to the ONNX model from pytorch. Exporting the ONNX model on ONNX Runtime is in progress.

3.)Image captioning on COCO dataset: Used a CNN-RNN architecture to produce captions.
CNN was a pre-trained Resnet network whose last layer was made trainable. For the RNN part, one layer of LSTM was implemented in pytorch with a hidden size of 256. This model started producing good captions after 10 epochs.

EDUCATION

R V College of Engineering

2013 - 2017

B.E. in Electrical &
Electronics Engineering
8.2 C.G.P.A

Sri CHaitanya Jr. Kalasala

2011 - 2013

96%

Guru Nanak Public School

2011

9.2 C.G.P.A