Srikar Madarapu

📱 (+91) 91138 51558

✉ Madarapu.Srikar@gmail.com

🔘 srikar8.github.io

in linkedin.com/in/srikar8

📍 Warangal, Telangana, India.

SKILLS

- C | C++
- Python
- Tensorflow | Keras
- Jupyter Notebook
- ROS
- Open CV
- Matlab
- HTML5 | CSS | JS
- Git | GitHub
- Linux | Bash
- Adobe Photoshop
- Adobe Lightroom

EDUCATION

Bachelor of Technology (B.Tech), Computer Science & Engineering (2014 - 2018)

NIIT University (Neemrana)
CGPA: 6.28/10

Senior Secondary (2014)

Sri Chaitanya Jr.kalasala (Hyderabad)
Percentage : 87.00%

Secondary (2012)

Tejaswi Concept School (Warangal)
CGPA : 8.7/10

MOOC

- Introduction to Self-Driving Cars (Coursera)
- Self Driving Car Nano Degree Term-1 (Udacity)
- Neural Networks And Deep Learning (Coursera)

LANGUAGES

English | Telugu | Hindi | French

HOBBIES

Photography | Travelling

WORK EXPERIENCE

Computer Vision - Inferigence Quotient LLP (Bangalore)
May 2018 - Sep 2018

Worked on SLAM algorithms and Visual Inertial Odometry. Image acquisition from the handheld mobile camera and generating a point cloud of the indoor.
Tools/Libraries: ROS, C++, Python, Opencv, Calibration, Multi threading.

INTERNSHIPS

Project Trainee - Defence Research & Development Organization- CAIR (Bangalore)
Jul 2017 - Dec 2017

Worked on" Unsupervised depth prediction from single monocular image and simultaneous localization and mapping", CNN architecture takes a single RGB 2D image as input and generates a 2D depth map. This depth map is used in SLAM.
Tools/Libraries: C++, opencv, ROS, rviz, CNN, Caffe, Keras

EIP 2 - Inkers.ai (Bangalore)
Sep 2018 - Nov 2018

The internship is on Deep Learning, Computer vision, Reinforcement learning. Qualified phase - 1:- MNIST- 99.44% - 14.4k parameters, CIFAR10 - 91.62% - 878k parameters. Tools/Libraries: CNN, Python, Keras.

PROJECTS

Extended Kalman Filter
Jan 2019 - Jan 2019

This includes Lidar and Radar data fusion. The radar measurement space being a non-linear function requires linearization to apply Kalman Filter. This is done using Taylor series and Jacobian matrices in an Extended Kalman Filter approach. Tools/Libraries: C++, Udacity Car NanoDegree Term-2 Simulator.

Behavioral Cloning
Jan 2019 - Jan 2019

Utilized Keras deep learning framework and OpenCV to train a car to drive in a simulator. Achieved full performance in the training environment, through data selection/augmentation strategy and neural network tuning.

Traffic Sign Classification
Dec 2018 - Dec 2018

Utilized Tensorflow framework and OpenCV to train a classifier for the GTSRB traffic sign dataset. Implemented data augmentation and image jitter to achieved 92.6 accuracy on hold-out the test data set.

Advanced Lane-Finding
Nov 2018 - Nov 2018

Utilized OpenCV in Python Jupyter notebook to create a robust image processing pipeline for detecting, recognizing and identifying the current highway lane in a dash cam video. Calculated car position within the lane and lane radius of curvature.

Facial Key points & Expression recognition
Jan 2018 - Apr 2019

CNN model is trained with 16,000 sample data with 6 expression classes and 15 key points. Data Augmentation and Normalization of the input data for Achieving a validation accuracy of 72.12%

Optical Character Recognition
May 2017 - May 2017

Detecting MRZ Region from a Passport. Reading the detected region using the OCR function. Applied image processing technique to a denoise input image, Morphological operations for smooth edges.

Traffic Surveillance using Image Processing
Feb 2017 - May 2017

Detecting and finding the lane of the vehicle on the road. The algorithm detects vehicle Anomaly when the vehicle is moving in the wrong lane.