#### Sriharsha Annamaneni

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## **Education**

FLORIDA INSTITUTE OF TECHNOLOGY, Melbourne, FL	Dec 2016
Master of Science in Electrical Engineering,	CGPA 3.7
MANIPAL INSTITUTE OF TECHNOLOGY, Manipal, India	June 2014
Bachelors of Engineering in Electronics and Communication Engineering,	CGPA 7/10

#### Skills

**Programming:** C, C++, Python, Matlab **Libraries:** OpenCV, VLFeat, TensorFlow, Keras, matplotlib, numpy, scipy **Lab Experience**: Circuit Design & Debug (Analog & digital), working with microcontrollers & Peripheral devices, Real time operating systems **Circuit Analysis**: Pspice **Markup Languages:** Markdown, xml, xaml **Environments:** Anaconda, Jupyter notebook, ROS, Gazebo **Version Control:** Git

# **Projects**

#### • German Traffic Sign Classifier

Built a Deep Convolutional Neural Network for classifying the Traffic Sign Dataset using Tensorflow. Achieved accuracy of 92%. <a href="https://github.com/sriharsha0806/CarND-Behavioral-Cloning-P3">https://github.com/sriharsha0806/CarND-Behavioral-Cloning-P3</a>

### • Advance Lane Lines

Developed a Computer Vision Pipeline for detecting Lane lines using Python and OpenCV for detecting, recognizing the highway lane in an image or video. Calculates car position within lane and lane radius of curvature based on coefficients of polynomial fit. <a href="https://github.com/sriharsha0806/CarND-Advanced-Lane-Lines">https://github.com/sriharsha0806/CarND-Advanced-Lane-Lines</a>

### • Vehicle Detection and Tracking

Developed a Computer Vision Pipeline for detecting vehicles on road using Python, OpenCV and Keras with Tensorflow Backend. Achieved multiple Vehicle Detection across all frames of a fifty-second vehicle dash cam video. https://github.com/sriharsha0806/CarND-Vehicle-Detection

### • Behavioral Cloning

Developed Nvidia model in Keras to train a car in simulator. Achieved full performance in the training environment through intricate data selection/augmentation strategy. Implemented Generators due to memory constraint. https://github.com/sriharsha0806/CarND-Behavioral-Cloning-P3

### • Video Object Segmentation Aggregation

Algorithm Uses Unsupervised Object Segmentation in Unconstrained Videos using aggregation model on several Object segmentation methods. https://github.com/sriharsha0806/Video-Object-Segmentation

# • POD: Discovering Primary Objects in Videos

Algorithm attempts to identify the Primary Object in a set of video frames using Object Recurrence, Foreground and Background Object Models. <a href="https://github.com/sriharsha0806/POD-Primary-Object-Detection">https://github.com/sriharsha0806/POD-Primary-Object-Detection</a>

### **Experience**

## Bhabha Atomic Research Centre, Bombay, India Jan 2014-May 2014

Research Intern

Developed three stage image compression algorithm for Data collected by Instrumented Pipeline Inspection Gauge for Oil and gas pipelines. (https://sriharsha0806.github.io/sriharsha/thesis.pdf)

Parikshit Student Satellite team (www.parikshit.org/) Jan 2012-Dec2013

Subsystem Head of Communication and Ground station

Developed code for CC1101 transceiver and Designed Schematics of Communication subsystem and Managed team of 7 members. (https://github.com/sriharsha0806/Parikshit)

Completed Burn in test for Beacon, Thermal analysis for Power amplifier and RF components.

**Publication** "Development of Antenna Deployment Circuit for Nanosatellites" IEEE conference on circuit theory and design Sept 2013, Dresden, Germany