**TRAFFIC SIGNS RECOGNITION**

**Description**

In this Project, we build a deep neural network model that can classify traffic signs present in the image into different categories. With this model, we are able to read and understand traffic signs which is a very important task for all autonomous vehicles.

### Traffic Signs Recognition Using Deep Learning

Deep learning techniques have come to the rescue for recognition of traffic signs in autonomous vehicles. CNN model is the best for Image Classification.

**How to build/compile it?** <https://medium.com/@pushkarmandot/installing-tensorflow-theano-and-keras-in-spyder-84de7eb0f0df>

1. Create new Conda Environment: To create the new environment called ‘py35’ open up the Windows command prompt and type : conda create -n py35 python=3.5 anaconda
2. **Install Spyder in the New Environment:** To do this, first activate the environment by typing the following into the command prompt: activate py35, then type the command conda install spyder
3. Install the Packages: Once spyder has been installed we can install the relevant packages. Again we need to be in the relevant environment, so type: activate py35 , if needs Then type: conda install tensorflow
4. Run Spyder from the Environment: Type Command in Command Prompt activate py35 then type spyder (it launches the spyder using python 3.5)
5. <https://www.kaggle.com/meowmeowmeowmeowmeow/gtsrb-german-traffic-sign/data> Download the Data set.
6. After installing, now run TRAFFICSIGNSRECOGNITION.py file, then the model Traffic\_Recognition.h5 will be saved. Now, run the TrafficSignsRecognitionGUI.py file.