# CarND Traffic Sign Classifier Project Writeup

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### 1 Traffic Sign Recognition Project

This project consists on the following steps/tasks:

- Load the data set
- Explore, summarize, and visualize the data set.
- Design, train, and test a model architecture
- Use the model to make predictions on new images.
- Analyze the softmax probabilities of the new images.
- Summarize the results in a written report.

My project code can be found here:

#### 2 Data Set Summary & Exploration

I used the pandas library to provide a summary of the data set. I found that the

- Number of training examples = 34799
- Number of validation examples = 4410
- Number of testing examples = 12630
- The shape of a traffic sign image was (26, 25)
- Number of unique classes = 43

## 3 Exploratory Visualization of the Dataset

To visualize the data, I used matplotlib to show the distribution of classes in the training, validation, and testing set. The histogram shows how many examples of each class exist in each dataset.



- 4 Design and Test of a Model Architecture
- 5 Testing a Model on New Images
- 6 Visualizing the Neural Network