# CarND Vehicle Detection Project

The goals / steps of this project are the following:

* Perform a Histogram of Oriented Gradients (HOG) feature extraction on a labeled training set o f images and train a classifier Linear SVM classifier
* Optionally, apply a color transform and append binned color features, as well as histograms of color, to the HOG feature vector.
* Normalize the features and randomize a selection for training and testing.
* Implement a sliding-window technique and use the trained classifier to search for vehicles in images.
* Run the pipeline on a video stream and create a heat map of recurring detections frame by frame to reject outliers and follow detected vehicles.
* Estimate a bounding box for vehicles detected.