A traffic light image classifier was designed and built using supervised learning techniques. The model was trained on a set of 1483 images of traffic lights from a labeled dataset and then tested on a set of 297 pictures of non-standard traffic light images. The relatively small pixel size (20-40 pixels Height/Width) of the images made it difficult to classify some of the images even with human eyes.

A classification accuracy of 95% was achieved using relatively simple methods of testing by extracting and filtering color brightness and value features from the images.

**Relevant Libraries used:**

OpenCV – Computer Vision library.

Numpy – For operating on arrays and matrices.

Matplotlib – For loading and plotting image data.

Link: <https://github.com/jaideepsingh08/Udacity-iSDC-Projects>