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Ps7_report
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1a: (1188,)

When visualizing the hog vector, I got two results

First is similar to what can be found in the instructions

However when I saved the image, the result was the following image

1b: X_train = (100, 1188). Y_train = (100, 1)

1d: after lowering the threshold to .9, there was a false positive on image d5. And then it got three of the five pictures with the car correct. It couldn't handle the picture with the car rotated, and the one were it is further away with the foot in the frame.

To improve the performance of the detector the first thing I would do is run multiple windows of different sizes

2a: accuracy on training data = 98.35

2b: accuracy on testing data = 87.26S

My first assumption that could improve testing accuracy is reduce the feature space for the training data, the disparity between training and testing accuracy could be due to overfitting driven by the number of features