Digital Humanities Project

Sreenatha Bhatlapenumarthi
Roll no : 201001106

Training data	Test data	Image size	Accuracy
10	1	'M'	40%
10	2	'M'	40%
15	1	'M'	60%
15	2	'M'	40%
20	1	'M'	20%
20	2	'M'	40%
25	1	'M'	40%
25	2	'M'	40%
25	3	'M'	40%
30	1	'M'	20%
30	2	'M'	50%
50	2	'M'	50%
100	2	'M'	30%

Table 1. Results of painting classification using HOG feature

Classifier model : Multi-class SVM
Features : HOG
Classes : Picasso, Van Gogh, Dali, Monet, Cezanne

Other details regarding the classification :

- The 'Training data' and 'Test data' represent the number of images for each class of painting.
- Some minor errors in the training and testing data may exist due to improper extraction of images from google by the downloader script.
- Images are extracted in sets of 10 from every page of google image search result.
- Functional margin for differentiating classes is assumed to be the default.

$$\min y^{(i)} (\omega^T x^{(i)} + b)$$