Peer review of group 7

October 19, 2019

1 Summary

The authors first extract features from the MINST dataset and the Raphael painting dataset using both a ScatterNet and a Pre-trained VGG19. Then they visualise the features obtained by VGG19 using various unsupervised methods. They conclude that some unsupervised methods are able to detect structure in the data while others are not. Finally they train an SVM on both datasets using both raw data and features extracted by VGG19.

2 Strengths and Weaknesses

1. Conclusions/results are sound and well presented
2. A lot of different visualisation methods are tried
3. The graphics provide a nice understanding of how the models work (Figure 4 in particular)
4. Exploring more prediction methods as well as using the features from both ScatterNet and VGG19 would have provided more room for meaningful results about the prediction accuracy

3 Writing

The presentation of your report is good. The graphics provide a lot of interesting visual information, the tables provide a nice overview of the results, and the writing is also easy to read. Figure 3 and Figure 4 both have the same text below it.
Score: 4/5

4 Technical quality

I couldn't detect any flaws in the reasoning in your report. You tried a lot of different visualisation methods resulting in some meaningful conclusion about them. The conclusions about the prediction methods are also good. However by exploring more methods you could have probably obtained more meaningful results.
Score: 4/5

5 Conclusion

This is a good report.
Score: 4/5

6 Confidence of assessment

I read the report carefully, understood it and looked at the code.
Score 3/3