

Peer review of group 9

October 19, 2019

1 Summary

The authors first do experiments on the MINST dataset. They do feature extraction using a ScatterNet, a ResNet and a pre-trained VGG19, followed by a visualisation of those features using PCA and t-SNE. Finally they use Logistic Regression, LDA, Random Forest and SVM to do predictions. They obtain the best results with ScatterNet combined with LDA. Then the authors explore the Raphael forgeries dataset. They use a ScatterNet + fully connected SNN and compare it to a CNN. The ScatterNet + fully connected SNN performs better than the CNN because the CNN tends to overfit.

2 Strengths and Weaknesses

1. Conclusions are sound and interesting
2. A lot of different methods are used resulting in meaningful results from comparison
3. The theoretical part is easy to read and understand
4. The final conclusion should discuss the results, not just provide a summary of what was tried

3 Writing

The report is well written, well structured and interesting to read. Furthermore the tables nicely summarise the results. The final conclusion should state the most important results once again, instead of just reiterating what was tried.

Score: 4.5/5

4 Technical quality

I couldn't detect any flaws in the reasoning in your report. A lot of different methods were tried, resulting in a variety of meaningful observations and conclusions. Overall the analysis is sound and interesting.

Score: 5/5

5 Conclusion

This is a really good report.

Score: 5/5

6 Confidence of assessment

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

Score 3/3