• Summary of the report.

In this report, the authors use wavelet scattering and VGG19 to do feature extraction on MNIST dataset and Raphael paintings respectively. They visualize these features by using PCA, Manifold Learning, t-SNE method and use logistic regression to do image classification.

• Describe the strengths of the report.

They visualize these features by using different unsupervised learning methods.

• Describe the weaknesses of the report.

The report misses some parts, such as abstract, conclusion and reference.

The classification result of Raphael paintings is not shown in the table.

• Evaluation on Clarity and quality of writing (1-5): 3

The report doesn’t have abstract, conclusion and reference.

Figure 1 should be put in part 2 because the result is based on MNIST.

The first page has extra mark on the last line (33rd Conference on Neural Information Processing Systems (NeurIPS 2019), Vancouver, Canada).

• Evaluation on Technical Quality (1-5): 3

In Raphael paintings, the author didn’t show the result of the 7 unknown paintings. Maybe they can try other traditional supervised learning methods like SVM compared to logistic regression.

• Overall rating: 3

• Confidence on your assessment: 3