

Summary of the report:

The project extracts the feature of image on MNIST dataset and Raphael's paintings dataset by scattering net and pretrained deep neural networks VGG19 respectively, use different unsupervised learning methods such as PCA/MDS, Manifold learning (Diffusion Map, ISOMAP, LLE) and t-SNE to visualize the feature vectors extracted from Raphael's painting dataset and use SVM as classifier work on Raphael's paintings and MNIST dataset.

Strengths:

The report is clear and concise and the experiments are comprehensive. Good to compare different feature visualizations generated by various visualize methods.

Weaknesses:

Lack visualization of features extracted by scattering net and lack classification based on these features.

Evaluation on Clarity and quality of writing (1-5): 4

Evaluation on Technical Quality (1-5): 3

Overall rating: 3

Confidence on your assessment (1-3): 2