

review-group07-Wang-Ya

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1 Summary of the report

This project extracts the feature of image on MNIST dataset and Raphael's paintings dataset by scattering net and pretrained deep neural networks VGG19 respectively. It uses different unsupervised learning methods to visualize the feature vectors extracted from Raphael's painting dataset. It uses supervised learning methods to achieve the image classification in Raphael's paintings and MNIST dataset.

2 The strengths of the report

- use two different datasets, one for scattering net, the other for pretrained model.
- uses different unsupervised learning methods such as PCA/MDS, Manifold learning (Diffusion Map, ISOMAP, LLE) and t-SNE to visualize the feature vectors

3 The weaknesses of the report

- choose 1000 image samples from the MNIST dataset to do the feature extraction, just use a part of dataset.
- no assessment about the strengths and weaknesses of their approach

4 Evaluation on Clarity and quality of writing

- Rating: 5
- Comments: The report is clearly written, with a good use of examples and figures. It doesn't have problems with style and grammar. There aren't issues with typos, formatting, reference, etc.

5 Evaluation on Technical Quality

- Rating: 4
- Comments: The results sound technical. The claims are well-supported by experimental results. It is possible for the other researchers to replicate these results.

6 Overall rating

- 5

7 Condence on assessment

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