1. Summary of the report
   This report uses three networks, which are scattering networks, VGG and Resnet, to extract features in MNIST dataset. Then six unsupervised methods -- PCA, TSNE, MDS, LLE, ISOMAP and SE are applied to visualize the above extracted features. Finally, the author use traditional supervised learning methods--SVM, LDA, RandomForest and Logistic Regression to do image classification using the above extracted features.

2. Describe the strengths of the report
   1. try a lots unsupervised and supervised methods which helps us to better understand the strength and drawbacks of these methods.
   2. discussion about different visualization methods on the same feature are convincing.
   3. figures are clear and straightforward.

3. Describe the weaknesses of the report.
   1. There is a conflict between introduction and other part.VGG16 or VGG19, Resnet-18 or Resnet-50. For example, introduction says the author uses VGG16, but in table1, table 2 and part 3.2, the description is VGG 19. Also the title of part 3.2 and Resnet 50.
   2. The ScatNet features and Resnet features classification results seems strange on SVM method. So do other results, very low accuracy is unusual. Also comparison between Resnet and VGG are unfair, since the number of dimensions are very different. It's better to extract the same layer features.

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

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

6. Overall rating: (5- My vote as the best-report. 4- A good report. 3- An average one. 2- below average. 1- a poorly written one): 4

7. Confidence on your assessment (1-3) (3- I have carefully read the paper and checked the results, 2- I just browse the paper without checking the details, 1- My assessment can be wrong): 3

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