

1. Summary of the report

This report uses scattering net and three kinds of convolution neural network to extract features in MNIST dataset. Then, applying PCA and t-SNE to visualize ScatNet features and AlexNet features. Finally, six supervised methods are used to classify ScatNet features and Logistic Regression are used to classify other three CNN model features.

2. Describe the strengths of the report

1. try a lots supervised methods which helps us to know their performance in MNIST dataset.
2. discussion about why PCA doesn't work and t-SNE works are convincing.

3. Describe the weaknesses of the report.

1. In Image Classification part, these methods are supervised. a typo: 5 out of 6?
2. In Reference part, the second one is strange, better indicate where you cite it, how you use transfer learning strategy reported in this paper? The authors haven't cited works about the three pre-trained deep neural networks they used.

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

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): 3

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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