Comment 12

In paper 12, the project involves the MNIST dataset, with 60000 training examples and 10000 test examples. The author wants to find a way to best distinguish those handwritten digits. The author applied scattering net to make feature extraction. Then, based on those features, they used LDA, SVM, Random Forest to classify the images. In addition, they also tested VGG19 and ResNet.

In the step following the feature extraction, the author implemented PCA and t-SNE. Result shows that t-SNE performs much better than PCA, but time cost is greater too. For classification, the author used modified VGG19 and ResNet. In the end, it is shown in the result that LDA has the best performance of 0.9935, while VGG19 and ResNet reached respectively 0.9899 and 0.9881.

Strength: t-SNE provides a convincing result. When combined with LDA, t-SNE can achieve an amazing accuracy.

Weakness: The weakness of this paper is that the mathematics equations.

Evaluation on quality of writing: 3.

Evaluation on presentation: 4. The paper is well organized and clear.

Evaluation on creativity: 3.

Confidence on your assessment: 3.

Where is the code?