Summary

The report summarize the feature extraction models and traditional machine learning methods to test which one is more efficient for image classification by using MNIST dataset. The models are chosen as Scattering Net, AlexNet, VGG10, ResNet18 in the test, with PCA and t-SNE for the feature visualization, then exploring the traditional unsupervised learning methods to do image classifications based on the feature extracted. The cross validation is used to compare the performance of models.

Strength

The results are well organized and clearly written. Other researchers can replicate the results.

Weakness

Evaluation

- Clarity and quality of writing: 5

- Technique quality: 5

- Overall rating: 5

- Confidence of assessment: 3