• **Summary of the report.**

This report focus on feature extraction and transfer learning. MNIST dataset is used for training and validation. They use pre-trained deep neural network and scattering net for feature extraction. PCA are t-SNE are used for visualizing the extracted feature. They implemented six image classification method for scattering net and Logistic Regression achieve best accuracy.

• **Describe the strengths of the report.**

+: Writing, figures and tables are good. It's easy to understand what are they doing.
+: Experiments are abundant

• **Describe the weaknesses of the report.**

-: It would be better if more analysis are conducted. E.g., why is Adaboost not suitable for the dataset?

• **Evaluation on Clarity and quality of writing (1-5)**

4. Writing, figures and tables are quite clear. Very easy to understand. More analysis for experiments should be added.

• **Evaluation on Technical Quality (1-5)**

3. It follows the description of project1. Abundant experiments are conducted. The evaluation is OK and the performance is good. But there is an obvious mistake in the part of image classification that "unsupervised methods are used …". However, there are many supervised methods used such as SVM and LR.

• **Overall rating**

3

• **Confidence on your assessment (1-3)**

3