

### **Summary**

Group07 did the feature extraction on MNIST and Raphael's paintings with scattering net and VGG19 methods. They compared the projection result by method MDS, Diffusion map, ISOMAP, LLE, PCA, and SNE and got the scatter plot. Traditional classification method SVM was used to do the image classification and accuracy was posted to show the result.

### **Strengths**

1 They tried different methods on projection and gave the visually result.

### **Weakness**

- 1 No visualization part
- 2 The results are too simple and not enough
- 3 The scatter plot is interesting but can not give strong enough support to their methods.

### **Evaluation on Clarity and quality of writing (1-5) 2**

The report is clearly written and the figure of projection comparison is interesting. The figures they used from other papers or the internet lack citations. There is no discussion part to evaluation their work.

### **Evaluation on Technical Quality (1-5): 3**

The results are technically sound and no obvious flaws. The claims are not supported by theoretical analysis and lack of comparison. There is little reflection or discussion for the result and there is no visualization part to show the result of feature extraction. It is possible for other readers to replicate the results.

### **Overall rating: 3**

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

3 I have carefully read the paper and checked the results