## 1. Summary of the report

This report uses scattering net and ResNet18 to extract features from Raphael's paintings dataset. Due to the lack of data, the authors use square crops to augment it. Then PCA is used to visualize these two features. Finally, four traditional supervised methods are used to classify.

## 2. Describe the strengths of the report

- 1. try a difficult dataset, data is insufficent and the data augmentation looks reasonable.
- 2. try to find out the reasons about poor results and guess ensemble maybe good for disputed painting through the experiment.
- 3. Describe the weaknesses of the report.
  - 1. only Resnet18 uses augmentated data, why not use these data to scattering net? Very limited data also results in PCA visualization of ScatNet features make no sense.
  - 2. the green table in Image Classification is not stated clearly, what's these number represents, accuracy in test set? If it is, most of them haven't exceeded random guess. The line chart hasn't told us which supervised method was used to classify.
  - 3. the experiment part hasn't introduced how you split the dataset which makes the experiment part confusing.
- 4. Evaluation on Clarity and quality of writing (1-5): 3 typo: A sample of our crop selection process is given in the Figure, in which candidate crops that are not discarded are marked by grey dotted squares, and the crops selected to be saved are marked by red squares. I think 'not' should be removed here.
- 5. Evaluation on Technical Quality (1-5): 2
- 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): 2
- 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