Lab 4 GSI grading

This form contains the final scores and comments from the GSI.

The respondent's email address (**rebeccabarter@berkeley.edu**) was recorded on submission of this form.

Name of students in group *

Alan Dong, Amy Ko, Xiao Li

Readability

Readability of report (5 points) *

	1	2	3	4	5	
Narrative unclear and/or difficult to read	○	○	○	○	◉	Narrative very clear and/or easy to read

Grammar of report (5 points) *

	1	2	3	4	5	
Incorrect written grammar pervasive	○	○	○	○	◉	Excellent written grammar

Comments about readability

Careful with LaTeX quotes: left quotes are `` and right quotes are ''.

EDA & model choices

Exploratory data analysis *

	0	1	2	3	4	
Did not provide any exploratory figures or numerical summaries of the data	○	○	○	○	◉	Provided clear, relevant figures and summaries of the data

Comments about EDA

Nice correlation plot. Changing the expert labels from -1, 0, 1 to "cloudy", "unsure", "not cloudy" (or whatever the order is) would help with reading your density figures, but they are very clear otherwise.

Justification of variable selection *

	0	1	2	3	
Provided no figures, justification or discussion of variable selection	○	○	◉	○	Described clearly and thoughtfully which figures are best and provided insightful figures

Comments about variable selection

A lot more discussion and exploration (beyond simply comparing the densities) could have gone into which variables were the best for the task.

Appropriateness of prediction methods *

	1	2	3	
Did not discuss appropriateness of methods chosen	○	○	◉	Clearly outlined the assumptions and reasons for choosing each model

Comments on classifiers

Good job exploring the model assumptions. I like your discussion of LDSD -- pixels near one another should definitely have the same classification output! Excellent job defining a simple classification rule with the LDSD threshold.

Keeping the colors constant in Figure 8 would have helped with comparison, but you have done an excellent job thinking through the problem!

Model performance

Depth of exploration concerning model fit and convergence *

	0	1	2	3	4	
Did not discuss model fit	○	○	○	○	◉	Clearly described how well each model fit from a variety of different angles. Provided informative and high-quality visualizations

Thought about how to appropriately use cross-validation *

	0	1	2	3	
Did not consider CV carefully	○	○	○	◉	Clearly outlined that pixels should be grouped in some way when doing CV

Comments on model fit and convergence

It might have been interesting to compare different versions of cross-validation (e.g. what if you did 20-by-20 blocks instead of 5-by-5?).

Depth of exploration on patterns in misclassification errors *

	0	1	2	3	4	
Did not explore patterns	○	○	○	◉	○	Clearly explored and visualized patterns in misclassification errors

Comments on patterns in misclassification

A bit more exploration (e.g. visual exploration) would have made your analysis of misclassification errors stronger.

Justification of using model on future data *

	0	1	2	3	
Did not justify answer to whether or not the model would work well on future data	○	○	◉	○	Clearly explained why or why not the model would work on future data

Comments on using model on future data

I'm not necessarily convinced that your methods will work for future data. You only trained on 1 image, and you have seen that your model worked reasonable well for another 2 images, but there are thousands of possible images out there! I think we would need to collect more evidence to conclude that the model would work well. In addition.... what if the labels we received were incorrect in the first place?

Reproducibility

Everything was provided in order for reproducibility *

	0	1	2	3	
Did not provide all files needed	○	○	○	◉	Provided all files necessary and clearly labelled how to reproduce all analyses (i.e. which files produce what and how they all fit together)

Comments on reproducibility

Thanks for providing the README!

Conclusion

One or more things that were well done

Your report was very clearly written and your figures were well done. I particularly like that you came up with a simple yet effective thresholding classifier using common sense!

One or more things that could be improved upon

Some more analysis into the results of your algorithm performance would have made your report excellent.

Other comments

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