Final lab GSI grade

Name *

Todd Faulkenberry

Student ID *

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Readability *

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

Grammar *

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

Comments on readability and grammar

I appreciate your honesty about running out of time, but you were too negative on yourself throughout the report. It was good to bring up what you would have done with more time, but your correlations and RMSE really were not much different than other people.

Quality of exploratory data analysis *

	0	1	2	3	
Did not perform EDA	○	◉	○	○	Performed a thorough EDA and presented appropriate and appealing figures that highlighted the interesting parts of the data

Comments on EDA

I like that you discuss some of the EDA you did, but it would have been good to include some of the figures in the report

Appropriateness of regression methods *

	0	1	2	3	
Did not appropriately choose or implement regression methods	○	○	○	◉	Made sensible decisions in terms of choosing and implementing regression methods

Comments on regression methods (e.g. did the student try to fit the same model for each voxel or different models for each voxel - this makes more sense)

Looks good

Explained each of the model selection criteria (CV, ESCV, AIC, AICc, BIC) *

	0	1	2	3	
Did not explain the model selection criteria	◉	○	○	○	Clearly outlines what each model selection criteria does and the relative pros and cons of each criteria

Correctly implemented and compared model selection criteria (including using the correct correlation criteria rather than MSE) *

	0	1	2	3	
Did not compare model selection criteria	○	◉	○	○	Correctly implemented the criteria, discussed strengths and weaknesses, and provided insightful figures for the comparison

Comments on implementation and comparison of modeling and model selection criteria

Other than comparing the caret default to CV you don't do much here.

I am not sure what the default model selection criteria in caret is, but it seems to be that is prefers to pick very small models across most of the voxels.

Evaluation of model performance and diagnostic plots *

	0	1	2	3	4	
Did not evaluate model performance	○	○	◉	○	○	Thoroughly evaluated how well the models performed using correlation (including testing final model on a test set) and provided insightful and appealing figures for diagnostic plots and model interpretation

Comments on model performance evaluation and diagnostic plots

BTW your correlation values really are not that far off from what most people got in the report. The highest for most people was around 0.58 at voxel 9.

I believe the reason that you get some voxels that have NA for correlation is that the model selected only includes the intercept. Therefore it is predicting the same value for all the images and thus correlation cannot be computed.

You need to hold out a separate test set (in addition to the one you did in the report) to get a sense of how your final model selection would perform on new data (the val_feat data cannot be used as a test set as you don't have the actual response)

Interpretation of models *

	0	1	2	3	
Did not try to interpret the models	○	◉	○	○	Provided a thorough interpretation of the models

Comments on model interpretation

It would have been good to do some more here like maybe going back to the Gabor wavelets themselves and seeing if voxel 1 and 9 were responding to different directions.

Evaluation of model stability *

	0	1	2	3	
Did not discuss model stability	◉	○	○	○	Reasonably explored and discussed model stability

Comments on model stability evaluation

Did the student provide all files and instructions in their github repo necessary for reproducing the results and report *

	0	1	2	3	
Did not provide anything required for reproducibility	○	○	○	◉	Everything was provided and clearly named/described

General comments

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