Hello Dr. Antonelli,

I would like to propose an individual (1 person) project for the final project. As we covered regression trees and the paradigm of bagging, I want to revisit another relevant paradigm namely boosting for classification. I want to compare the performance between different types of boosting, and I am currently considering *AdaBoost*, *DeepBoost*, and *xgBoost*. I am thinking of using *accuracy*, *precision*, *recall*, and *F1-score* as the metrics; these are seen frequently as the default metrics on classification reports for machine learning. The boosting algorithms can be easily imported from the caret package. The dataset I want to use classifies car quality evaluation based on a number of categorical features.

The project would fall about equally towards #3 and #5 examples listed on the final project description. Since I am comparing multiple new algorithms not previously covered, would you fairly expect less mathematical explanations of how each algorithm works compared to focusing on only a single new algorithm? Also, feel free to provide any feedback

Thanks,

Caijun Qin