

1. Team name - i wish i were sleeping now

Team members – Mihail Eric, Jenny Hong, David Wang

2. Public leaderboard score - **0.57299**

3. In order to handle the NA's, we tried a couple data imputation techniques – we started with median imputation, like the suggestion in HW1, along with the binary variable for whether or not the data had been imputed. However, it looked like mean imputation led to better performance on the validation set, so we switched to that. The various methods we tried were bagging, random forests, and boosting. It looked like out of all the parameter choices for random forests, using all the features as possible predictors worked the best, namely using bagging. Boosting gave us similarly good results, two sets of parameters that worked well were shrinkage parameter 0.001 and 2000 trees, and shrinkage parameter 0.01 and 200 trees. We set the # of splits in each tree to 4 since that was what the examples in ISL gave :) The first submission we sent to Kaggle w/ mean imputation, shrinkage parameter 0.01, and 200 trees had validation error of 0.5883742, which was actually worse than the root MSE of the test set. No complaints there though :)