Project 2 Questions & Answers

Harlan Wittlieff

Data Science, Bellevue University

DSC 680: Applied Data Science

Dr. Catie Williams

July 24, 2022

Questions and Answers

- 1. Is the model's accuracy score high enough to be reliable?
 - The best model scored in the top 30% so far in the competition on Kaggle. There is some room for improvement, but overall the model is performing well.
- 2. When will the model be implemented?
 - All four of the models have been submitted to the Kaggle competition.
- 3. What additional steps can be taken to boost the model's accuracy?
 - Adding a neural network to the combined model may increase the overall accuracy.
 - Additionally, investigating other methodologies for dealing with the nulls in the dataset could provide better results in terms of accuracy.
- 4. How will we know if the model is working as intended?
 - Since a subset of the data was held back for evaluation in the competition, submitting our results to Kaggle will provide immediate feedback on the performance of the model.
- 5. What additional information may be useful to the model in the future that we should begin tracking now?
 - If the project was not fictitious, knowing the height and weight of the passengers may provide some physics insights into the likelihood of transportation.
- 6. Which feature(s) provided the greatest predictability into the model?
 - When reviewing the results, whether or not the passenger was in CrysoSleep was the most predictive feature on its own.
- 7. Does any bias have the potential to exist in the model?
 - There is always potential for bias to exist in any model; however, care was taken to ensure that the risk is minimal.
- 8. How do these models rank among the other models created for this Kaggle competition?
 - The best model scored in the top 30% of the competition.
- 9. Are there any follow up steps after the competition concludes?
 - Reviewing the methodology of the top performing models will provide useful insights and feedback into where the success of this project could have been enhanced.
- 10. Would investigating any other model types be beneficial?
 - Neural networks may be beneficial.