Stat 495R: Experiential Learning through Kaggle

Competition Checklist

Each student should turn in the following checklist to receive a passing grade for the Kaggle competition. Note that you should NOT look at someone else’s Kaggle notebook until you have submitted twice (I want you to try to solve issues yourself and not just copy what someone else did).

Student Name: Emmanuel Valdez

Competition Name: Store Item Demand

Due Date: Friday March 19, 2021

1. Submission 1 Results (1pt)
   1. Score: 52.8
   2. Public Score Percentile (Number of Entries): 441/459
   3. Brief Description of Method Used: I just used a basic arima model without any regressors and with parameters that the auto.arima function defaulted to.
2. Submission 2 Results (1pt)
   1. Score: 61
   2. Public Score Percentile (Number of Entries): 450/459
   3. Brief description of method used and what you did differently from 1st submission: This time I used the tbats function and included seasonality that tracked the weeks and the years. I thought this submission would be better than it was. I’m not sure what I could’ve done differently to improve this model.
3. Submission 3 Results (1pt)
   1. Score: 154
   2. Public Score Percentile (Number of Entries): 459/459
   3. Brief description of method used and what you did differently from 2nd submission: I tried the prophet package in this submission, but I didn’t read too much into what was going on and just did a basic model without any regressors. I’m not sure if I implemented it correctly considering my results. The forecast was extremely inaccurate.
4. Github Repository with my code (1pt):
   1. URL: https://github.com/Valdez95/StoreItemDemand
5. On your README file in your GitHub repository for this project, answer the following (1pt):
   1. What is the overall purpose of this project?
   2. What do each file in your repository do?
   3. What methods did you use to clean the data or do feature engineering?
   4. What methods did you use to generate predictions?