Facebook Prophet vs NYC Shelter Demand

01 RENAMING

Facebook Prophet is very delicate when it comes to names. The date variable must be named "ds" and the time series is "Y"

02 HOLIDAYS

Create the holidays dataframe with Easter and Thanksgiving. Use pd.concat to combine everything.
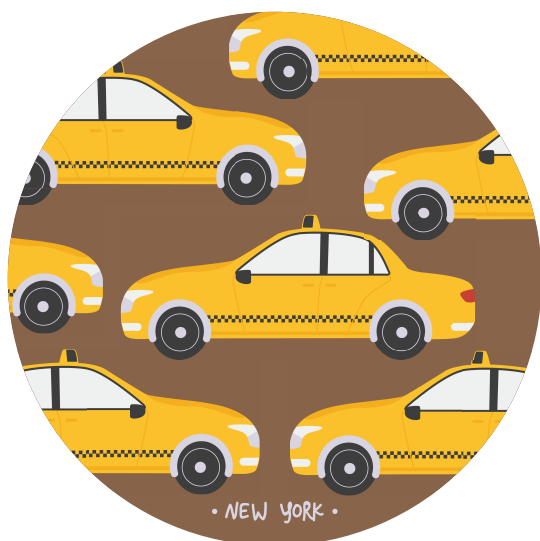
03 PROPHET MODEL

You are ready to create the prophet model. You need to add one regressor: Christmas. Also, remember that, if you have more regressors, you need to add one by one.
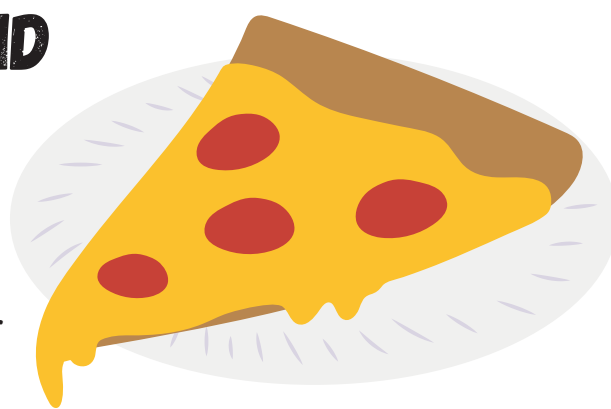
04 CROSS-VALIDATION

Cross-validation is the process of measuring your model with multiple test sets. It is particularly important for time series, to test the model in different parts of the seasonal cycle. Set horizon = 31, initial = 2400. Assess with the Mean Absolute Error (MAE).
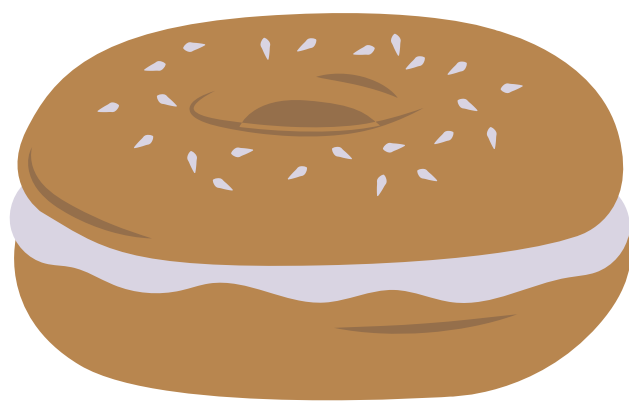
05 PARAMETER GRID

Just before running the Parameter Tuning, you must create a grid with all options that you want to try. Remember that the more options you try, the longer it takes.

06 HYPERPARAMETER TUNING

We have done a lot and now it is time to have the computer work for us. Create the loop to test all options, while doing Cross-Validation. Use the MAE to assess and gather the results at the end.

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