Time Series Analysis

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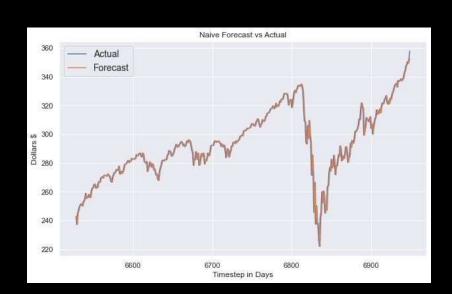
Business Use Case

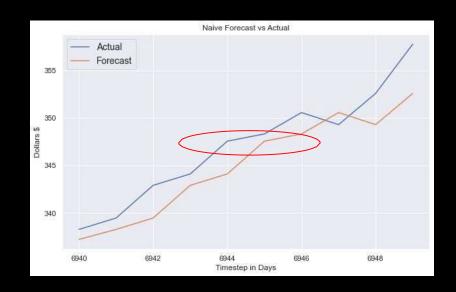
Algorithmic driven trading strategy to improve ROI

Experiment Goal

Test if more complex state of the art models outperform simple models

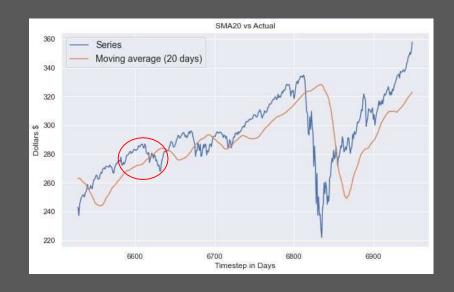
Naive Forecast



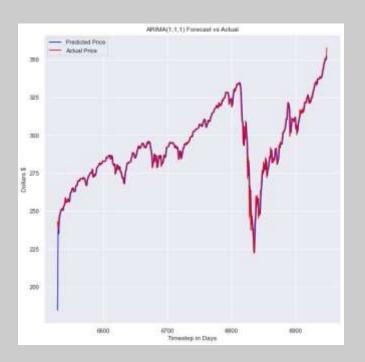


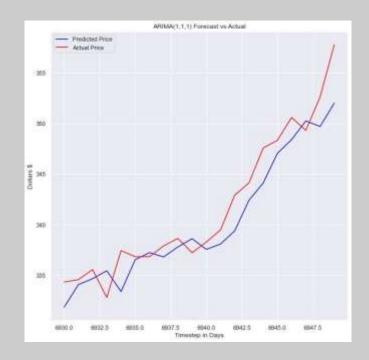
Simple Moving Average (SMA 5 and SMA 20)





ARIMA Model AR(1), I(1), MA(1)





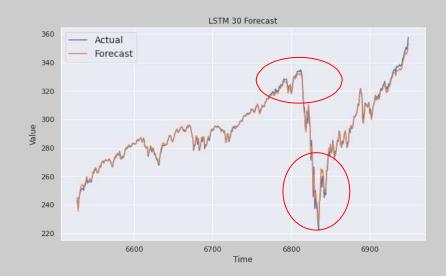
Recurrent Neural Network Model





Long Short Term Memory Model





Preprocessing with CNN (Convolutional Neural Network)

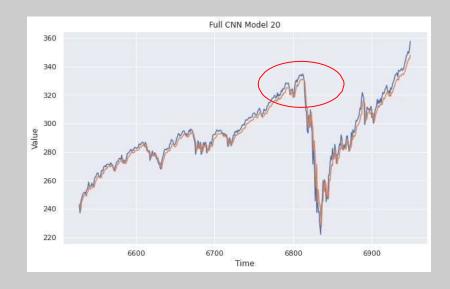


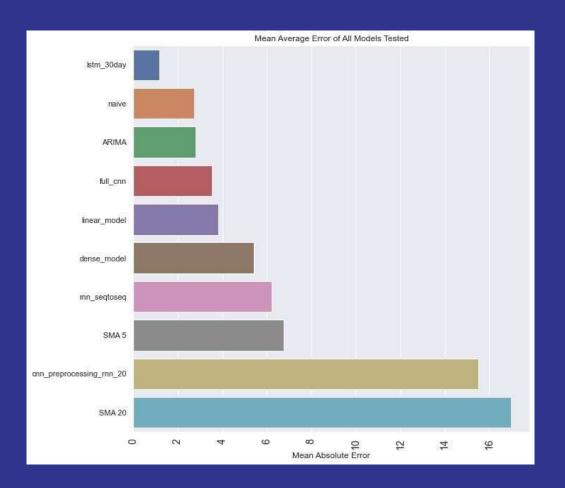


Full CNN

(Convolutional Neural Network)







Full Model Results

THANK YOU!