Meiners- Milestone 4 – Q&A – Project 2

Q: Could this analysis be leveraged for other financial assets?

A: Yes, the model could be leveraged for other assets other the fit would need to be recompiled to refit on the datapoints of the other asset.

Q: What are some events which could impact the reliability of the forecast?

A: Catastrophic events such as pandemics or where other financial markets are over leveraged can have a significant impact the value of the S&P 500

Q: How can the model be further improved?

A: The model can be improved by continuously feeding in new inputs to update the forecast

Q: Could the model be leveraged in an ensemble approach?

A: Yes, the model could be added to other types of prediction models such as investor sentiment to provide a more robust model for prediction

Q: How are outliers and missing values handled?

A: Outliers and missing values are automatically handled by the STAN package so they do not skew the forecast of the forecast.

Q: Is there an API that could be leveraged to stream in current data?

A: Yes, Yahoo offers an API which can be leveraged to automatically ingest values if wanting to construct a pipeline or automated script.

Q: Are you confident in the reliability of the data sources leveraged for analysis?

A: Based on the known increases in the S&P 500 over time, the forecast is predicting values which one would expect per this historical trend

Q: What are advantages of leveraging neural network for time series forecasting?

A: Neural Networks allow for deep learning and the ability to interpret hidden aspects of data better than traditional linear regression models

Q: What are the disadvantages of leveraging a neural network in predictions?

A: Neural Networks can be more resource intense and require more tuning than other types of models.

Q: Is it possible to have a longer forecasting period?

A: The forecast period can be longer although the longer the forecast from the current timeframe the more it can skew due to unknowns in unexpected events in financial markets.