**Existing Research and Reproduce Available Solutions**

* Existing Research: <https://www.atlantis-press.com/article/125977361.pdf>
* Available Solution: <https://www.kaggle.com/code/ndrewgele/omg-nlp-with-the-djia-and-reddit>
* Reproduced result: <https://github.com/hsreekumar/Data_capstone/blob/main/Stock_News_Data/Existing%20Research%20and%20Reproduce%20Available%20Solutions/NLP_with_the_DJIA_and_Reddit.ipynb>

Conclusions

The available solution provides stock sentiment prediction obtained from Logistic regression. It doesn’t seem to have great accuracy though. Existing research claims to obtain better accuracy using better data cleaning techniques and advanced algorithms like RandomForestClassifier and Deep Learning models using BERT Transformers.

The objective would be to apply different ML algorithms like RandomForestClassifier, followed by Neural Network models like LSTM, RNN etc, followed by even more advanced DeepLearning models for NLP like BERT and compare the results.