File name: FID-013.txt
Result: PLAGIARISM NOT DETECTED
Plagiarism percentage: 0%

Text to analyze:

Explainable Machine Learning Exploiting News and Domain-Specific Lexicon for Stock Market Forecasting In this manuscript, we propose a Machine Learning approach to tackle a binary classification problem whose goal is to predict the magnitude (high or low) of future stock price variations for individual companies of the S&P 500 index. Sets of lexicons are generated from globally published articles with the goal of identifying the most impactful words on the market in a specific time interval and within a certain business sector. A feature engineering process is then performed out of the generated lexicons, and the obtained features are fed to a Decision Tree classifier. The predicted label (high or low) represents the underlying company's stock price variation on the next day, being either higher or lower than a certain threshold. The performance evaluation we have carried out through a walk-forward strategy, and against a set of solid baselines, shows that our approach clearly outperforms the competitors. Moreover, the devised Artificial Intelligence (AI) approach is explainable, in the sense that we analyze the white-box behind the classifier and provide a set of explanations on the obtained results.

Sentence analysis:

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