

**Modified Extreme Learning Machine Algorithm with Deterministic
Weight Modification for Investment Decisions Based
on Sentiment Analysis**

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80_RECOMMENDATIONS

The developed sentiment-based DWM-ELM called S- DELM is applied to predict the stock market price. The use of technical indicators, optimal hyperparameters optimization, and customer sentiment are considered in the proposed research work for achieving the following remarkable objectives such as reducing prediction error, enhancing prediction accuracy, and making fast learning time and fast convergence rate. Further, some of the following remarkable points are short definitions of the contribution of the research work, The sentiment-based optimized ELM is applied to predict the stock price.

- To determine user sentiment on the stock, a CNN-based classification algorithm is used to calculate the sentiment index (SI).
- To identify factors affecting the share market with stockholder sentiment analysis or classification of opinion sentiment into bullish or bearish.
- To produce sentiment analysis in real-time that can forecast the value of the stock market and, using historical data, estimate the approximate share price.
- The DWM method is used to optimize the weights and bias of ELM to enhance the performance ELM method.
- Six stock market datasets are used to analyze the performance of S-DELM
- Different performance analyzers are considered for analyzing the strength of the S-DELM method