

Expanding Trading Strategies By Studying Sentiment Correlation With Data Mining Techniques

Authors : Ved Kulkarni, Karthik Kini

Abstract : This experiment aims to understand how the media affects the power markets in the mainland United States and study the duration of reaction time between news updates and actual price movements. It has taken into account electric utility companies trading in the NYSE and excluded companies that are more politically involved and move with higher sensitivity to Politics. The scraper checks for any news related to keywords, which are predefined and stored for each specific company. Based on this, the classifier will allocate the effect into five categories: positive, negative, highly optimistic, highly negative, or neutral. The effect on the respective price movement will be studied to understand the response time. Based on the response time observed, neural networks would be trained to understand and react to changing market conditions, achieving the best strategy in every market. The stock trader would be day trading in the first phase and making option strategy predictions based on the black holes model. The expected result is to create an AI-based system that adjusts trading strategies within the market response time to each price movement.

Keywords : data mining, language processing, artificial neural networks, sentiment analysis

Conference Title : ICCIT 2025 : International Conference on Computing and Information Technology

Conference Location : Ottawa, Canada

Conference Dates : March 24-25, 2025