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Forecasting Price Trends of Cryptocurrency by Sentimental Analysis on Twitter

A Project Proposal

by

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ABSTRACT

Cryptocurrencies have a market value valued at more than 2 trillion dollars, making them a popular replacement for traditional financial assets. verbal and digital feeds took a massive impact on the market. Due to this, sentiment research has developed into a crucial tool for traders and investors who wish to make wise choices. The research presented here describes an approach based on machine learning for conducting sentiment analysis on cryptocurrency using data from Twitter. The author collected popular cryptocurrency data sets including Bitcoin, Ethereum and Dogecoin. used various pre-processing techniques. Natural language processing (NLP) and data mining techniques are the commonly used research methods for sentimental analysis, which aim to discover hidden information from linguistic data. Our results show that the Naive Bayes algorithm outperforms the other algorithms with an accuracy of 87.5%. We also found that the sentiment of the tweets has a significant impact on the price movement of cryptocurrencies. Sentiment analysis of cryptocurrency tweets can be used to predict price movements. Positive sentiment tweets are associated with price increases, while negative sentiment tweets are associated with price decreases. Our approach can help investors and traders make better decisions by analyzing the emotional tone of tweets about cryptocurrencies.

Keywords - Cryptocurrency, Market trend prediction, Opinion mining, Machine learning, Accuracy Natural language processing (NLP), Algorithm, Text data.