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MetaMind : A Meta-Ensemble Approach for Predicting the Future Price of Cryptocurrency

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Abstract

Predicting the price of cryptocurrencies is a challenging task due to their volatile nature. Even a slight shift in market trends can lead to significant price changes, making it difficult to accurately forecast future values. In this research, the author proposes a solution that uses Deep Learning and Meta-Ensemble approach to predict cryptocurrency prices.

The proposed solution utilizes historical Cryptocurrency market data and social media sentiment analysed data to train Deep Learning models, which can then predict future prices. The Meta-Ensemble approach is applied to combine the predictions of multiple models, resulting in a more accurate and robust prediction model. This approach overcomes the limitations of individual models by combining their strengths to produce a more optimum model.

To evaluate the proposed model, the author has conducted experiments on various cryptocurrency datasets, using evaluation metrics such as Mean Absolute Error (MAE), Mean Squared Error (MSE), and R-Squared (R^2) values. The results show that the proposed model outperforms traditional machine learning models in terms of accuracy and performance. This approach has the potential to help investors and traders make informed decisions by accurately predicting cryptocurrency prices.

Keywords : Prediction System, Deep Learning, Meta-Ensemble, Ensemble, Sentiment Analysis, Cryptocurrency, Bitcoin, Data Science