CAPSTONE PROJECT

Bitcoin Price Prediction

Presented By:
A. RUBAA RAGAVI -Arunai Engineering College- Biotechnology

edunet foundation

OUTLINE

- Problem Statement
- Proposed System/Solution
- System Development Approach
- Algorithm & Deployment
- Result
- Conclusion
- Future Scope
- References

edunet foundation

PROBLEM STATEMENT

The goal is to develop a predictive model for Bitcoin's price movements over a specified time horizon. This model should utilize historical price data, along with relevant features such as trading volume, market sentiment indicators, and macroeconomic factors. The aim is to accurately forecast whether the price will increase, decrease, or remain stable within the defined time frame, thereby assisting investors and traders in making informed decisions.

PROPOSED SOLUTION

Develop a predictive model using historical Bitcoin price data and relevant features, employing machine learning techniques such as LSTM or RNN for time series forecasting, optimizing hyperparameters, and continuously improving the model for accurate real-time predictions.

SYSTEM APPROACH

A structured framework encompassing data acquisition, preprocessing, feature selection, model selection, training/validation, evaluation metrics, deployment, and continuous improvement through a feedback loop, aiming to develop an effective predictive model for Bitcoin price movements.

ALGORITHM & DEPLOYMENT

Algorithm and development for Bitcoin price prediction involve selecting appropriate machine learning techniques, such as LSTM or RNN, to analyze historical price data and relevant features. This includes gathering and preprocessing data, training the model, evaluating its performance, deploying it for real-time predictions, and iteratively refining the model with new data and updates to improve accuracy and effectiveness.

RESULT

Generally, the outcome includes predicted price movements or values for future time periods. These predictions can assist investors and traders in making informed decisions regarding buying, selling, or holding Bitcoin. Evaluation metrics like mean absolute error (MAE), mean squared error (MSE), or root mean squared error (RMSE) are used to assess the accuracy of the predictions. The ultimate goal is to develop a model that accurately captures Bitcoin price dynamics and provides valuable insights for decision-making in the cryptocurrency market.

CONCLUSION

Bitcoin price prediction involves using machine learning algorithms to forecast future price movements. While no model can guarantee exact predictions due to market volatility, these models provide valuable insights for investors and traders to make informed decisions. Continuous refinement and adaptation are essential for improving predictive accuracy over time in the dynamic cryptocurrency market.

FUTURE SCOPE

Bitcoin price prediction is the process of forecasting the future value of Bitcoin, the world's most well-known cryptocurrency, based on various data sources, mathematical models, and analytical techniques. It involves analyzing historical price data, market indicators, sentiment analysis, and macroeconomic factors to anticipate potential trends and fluctuations in Bitcoin's value. Prediction methods may include advanced data analytics, sentiment analysis of social media and news, blockchain analysis, technical analysis, integration of external data sources, quantitative modeling, and AI-based approaches. Despite advancements in prediction techniques, accurately forecasting Bitcoin prices remains speculative and subject to significant uncertainty and risk.

REFERENCES

Bitcoin price predictions can be found on platforms like Bloomberg, CoinDesk, and social media from various experts and analysts. Always consider multiple sources due to the volatile nature of the cryptocurrency market.

THANK YOU

edunet
foundation