Bitcoin Price Prediction - Using Deep Learning System

Barsha Das[*], Rayeswari Dhar

Department of Computer Science & Engineering, Techno College of Engineering Agartala

*Corresponding author

Abstract

Background: Cryptocurrencies are a digital way of money in which all transactions are held electronically. Virtual currencies become the most favourable and used for commercial enterprise transactions all over the world [1]. The popularity is due to its innovative characteristics such as transparency [2].

Objective: Our survey covers work done on bitcoin (BTC) price prediction using different techniques, the need, and evaluation of recurrent neural network (RNN) and its system architecture [3].

Methodology: There are two different deep learning-based prediction models to forecast daily price of bitcoin by identifying and evaluating relevant features by the model itself. After applying both the models for bitcoin prediction, we in this work, we have proposed deep learning mechanisms such as LSTM and GRU which are the latest and efficient techniques for the forecasting of bitcoin price.

Result and discussion: According to our research the current Bitcoin Price Prediction, the value of Bitcoin will rise by 18.22% and reach $71,510 by October 22, 2021.Result analysis and experimental evolution on TAIEX data of 2021, state that the proposed method has shown the RMSE value is 18.8287473079.

Conclusion and Future Work: The main objective of our study is to forecast the bitcoin price with improved efficiency using deep learning models. We have implemented two deep learning techniques such as LSTM and GRU as prediction models. extreme learning machines, support vector machines may be applied to get better accuracy for the prediction result.

References

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