

CRYPTOCURRENCY REAL TIME DATA, NEWS FETCHER AND PREDICTION

A PROJECT REPORT

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BONAFIDE CERTIFICATE

Certified that this project report **Cryptocurrency Realtime Data and news fetcher and prediction** is the bonafide work of **Azhar Hasan (18113174), Kaushik Bajaj (18113161), P. Duhitha (18113191)** who carried out the project work under my supervision during the academic year **2021-2022**.

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ABSTRACT

Cryptocurrency is the latest form of currency, which is used for trading and other exchanges in market. In pandemic, massive growth has been witnessed in both trading and also in returns. Cryptocurrency price prediction is very difficult and quite impossible as its highly volatile. In this paper, an algorithm involving recurring neural networks and Gated Recurrent Unit (GRU) and Long Short Term Memory (LSTM) is proposed to forecast the cryptocurrency's price. The unsupervised learning technique is seeming to be used as there is more accuracy in prediction in spite of highly volatile dataset.

The price prediction of the cryptocurrency is done by taking bitcoin price as the input to the machine learning algorithm. A complete web app is also implemented using various backend APIs to display detailed information about the various cryptocurrencies and its market valuer predictions. Data like market Cap, Volume, Last traded, 24Hours Volume has been used for prediction. Real time graphs have been plotted for the given crypto currency using Chart-JS. APIs like coin ranking api and bing news api specifically target cryptocurrency as it's subject. The performance of the model is compared with the existing algorithms and found to provide better accuracy.

For getting information about the cryptocurrency through api we send request such as we need to check the price of the Litecoin then every coin has some coin id number through which it sends the request to get the data and the request here will be history if that particular cryptocurrency data and based on this the data is obtained and then using the chartjs it will plot the graph for the price.