Price Forecasting And Analysis Of Bitcoin

A PROJECT REPORT

Submitted by

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BONAFIDE CERTIFICATE

Certified that this project report **"Price forecasting and analysis of Bitcoin"** is the Bonafide work of "BHUVANESH R (211420104041), GOKULANANTHAN K (211420104081) who carried out the project work under my supervision.

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Submitted for the Project Viva – Voce examination held on _____

INTERNAL EXAMINER **EXTERNAL EXAMINER**

DECLARATION BY THE STUDENT

We, BHUVANESH R (211420104041), GOKULANANTHAN K (211420104081) hereby declare that this project report titled "**PRICE FORECASTING AND ANALYSIS OF BITCOIN**", under the guidance of **Mrs S PREENA JACINTH SHALOM, M.E.** is the original work done by us and we have not plagiarized or submitted to any other degree in any university by us.

ACKNOWLEDGEMENT

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ABSTRACT

Bitcoin, the ruler of cryptocurrency plays an important role in blockchain technology. - In this project, we proposed to predict the Bitcoin price accurately taking into consideration various parameters that affect the Bitcoin value. we aim to understand and find daily trends in the Bitcoin market while gaining insight into optimal features surrounding Bitcoin price. Our data set consists of various features relating to the Bitcoin price and payment network over the course of every years, recorded daily.Features such as the opening price, highest price, lowest price, closing price, volume of Bitcoin, volume of currencies, and weighted price were taken into consideration so as to predict the closing price of the next day. Random forest model designed and implemented on scikit learn frameworks to build predictive analysis and evaluated them by computing various measures such as the RMSE (root mean square error) and (Pearson's correlation coefficient) on test data. Flask framework was used to make prediction in webpages and Beautiful-Soup is used to scrap the data from 'url': 'https://bitinfocharts. The future prediction of bitcoin is predicted as a result from today real time data.

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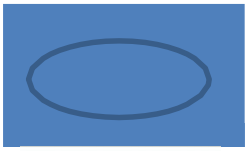
LIST OF SYMBOL

SYMBOL	NAME	FUNCTION
	Start/end	An oval represents a start or end point
	Arrows	A line is a connector that shows relationships between the representative shapes
	Process	A revtangle represents a process

LIST OF ABBREVATION

S.NO	ABBREVATION	DESCRIPTION
1	**BTC**	Bitcoin
2	**LSTM**	Long-Short Term Memory model
3	**GRU**	Gated Recurrent Unit

4	**BPTT**	Back Propagation Through Time
5	**CNN**	Convolutional Neural Network
6	**RSI**	Relative Strength Index
7	**API**	Application Programming Interface
8	**UML**	Unified Modeling Language
9	**HTTPS**	Hyper Text Transfer Protocol Secure
10	**MAE**	Mean Absolute Error
11	**MSE**	Mean Squared Error
12	**RMSE**	Root Mean Squared Error