

# Cryptocurrency Prediction



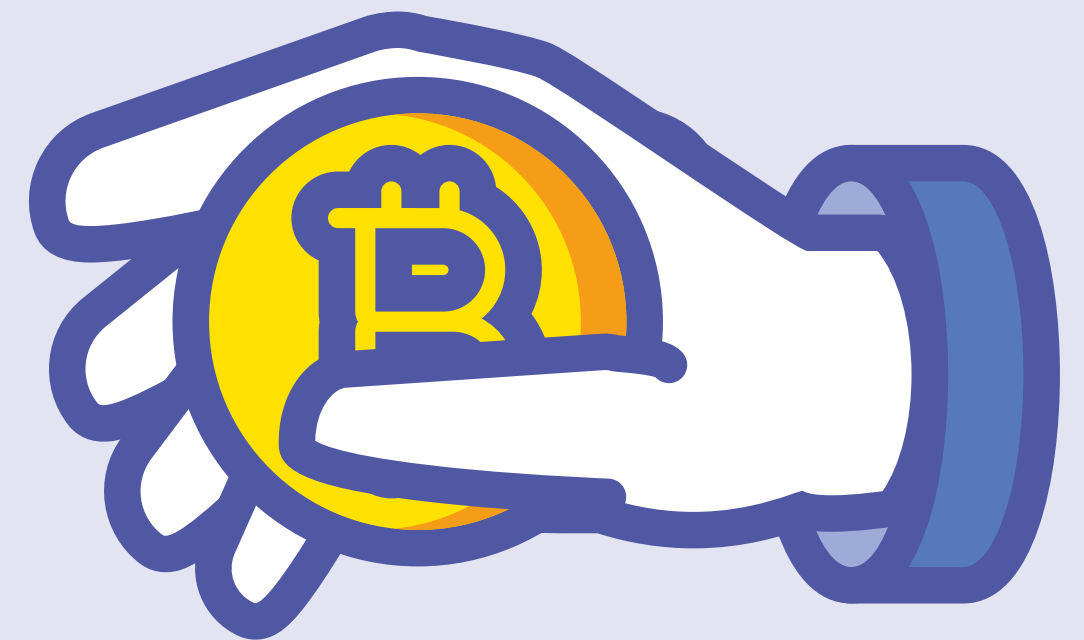
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# Objective

**Cryptocurrency gaining a lot of interest in recent years. However , many people think it is risky to invest in Cryptocurrency market since it is a highly volatile market. As a result we aim to enhance the prices prediction in Cryptocurrency market by applying neural network in predicting their prices. Which will allow people to invest more in this market.**



# The Data Set

## **YFinance**

*The index is the date and the values are the close prices.*

## **Bitcoin**

*Bitcoin historical prices*

## **Nvidia**

*A technology company that we wanted to compare it with bitcoin prices*



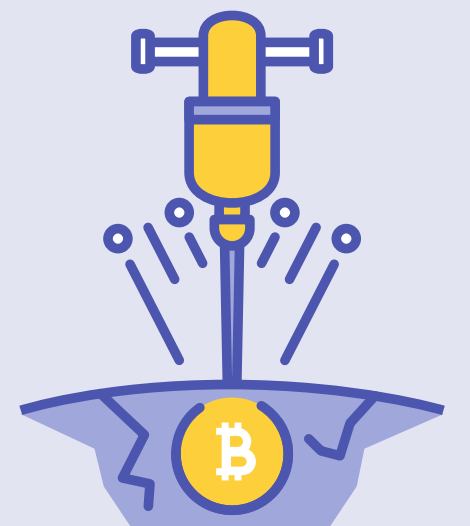
# Model Selection

## **Neural Network :**

Neural networks process past and current data to estimate future values. Since we are dealing with prices, accuracy is an important aspect that can't be compromised ; hence, Neural Network provides high accuracy. Especially in a large dataset

## **The structure of a neural-network algorithm has three layers:**

- The input layer feeds past data values into the next (hidden) layer.
- The hidden layer encapsulates several complex functions that create predictors; often those functions are hidden from the user.
- The output layer collects the predictions made in the hidden layer and produces the final result.



# Model Descriptive Performance

Model: "sequential\_1"

Layer (type)	Output Shape	Param #
lstm_3 (LSTM)	(None, 60, 50)	10400
dropout_3 (Dropout)	(None, 60, 50)	0
lstm_4 (LSTM)	(None, 60, 50)	20200
dropout_4 (Dropout)	(None, 60, 50)	0
lstm_5 (LSTM)	(None, 50)	20200
dropout_5 (Dropout)	(None, 50)	0
dense_1 (Dense)	(None, 1)	51

Total params: 50,851  
Trainable params: 50,851  
Non-trainable params: 0

lstm_3_input	InputLayer	input:	[(None, 60, 1)]
		output:	[(None, 60, 1)]



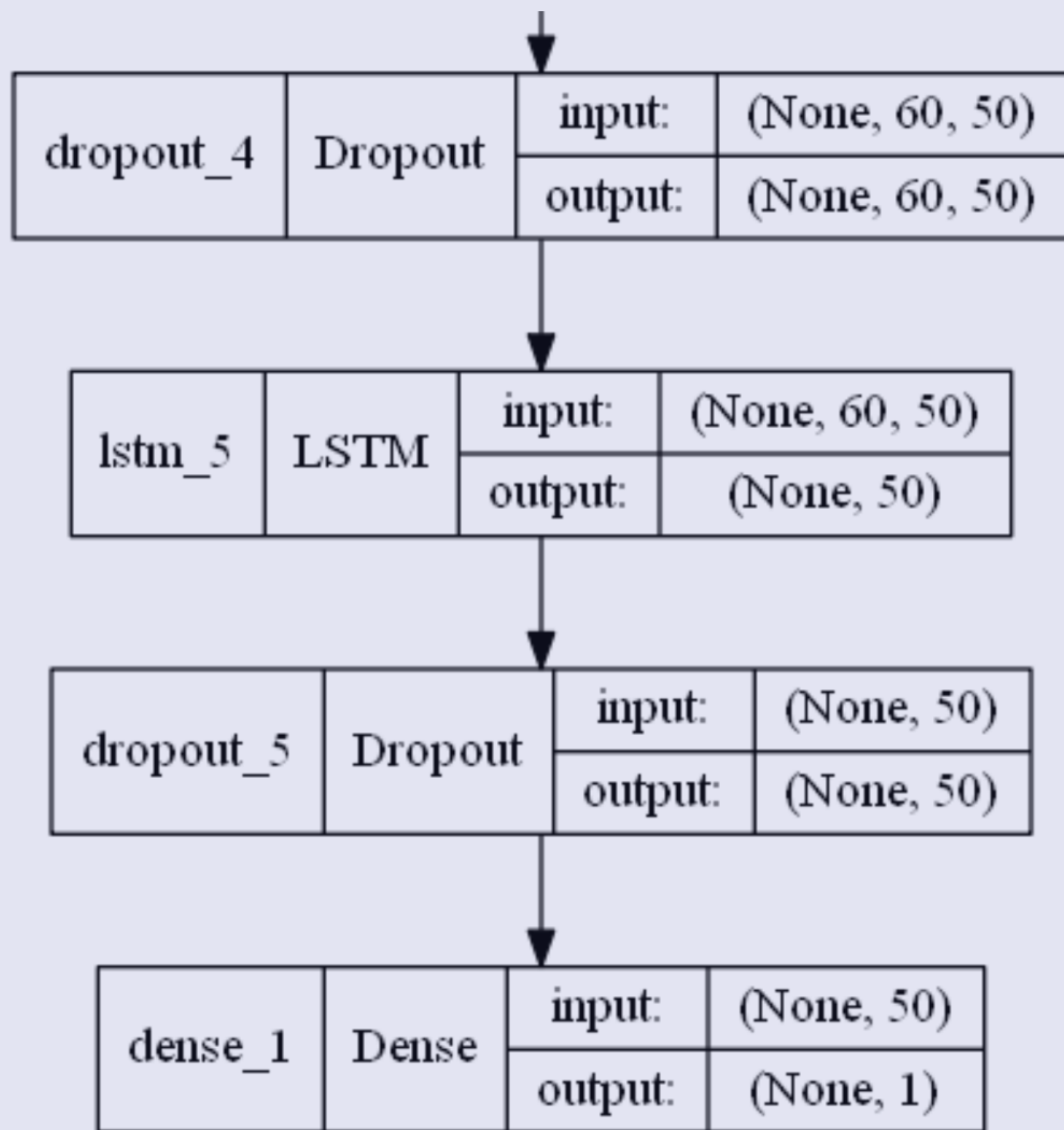
lstm_3	LSTM	input:	(None, 60, 1)
		output:	(None, 60, 50)



dropout_3	Dropout	input:	(None, 60, 50)
		output:	(None, 60, 50)

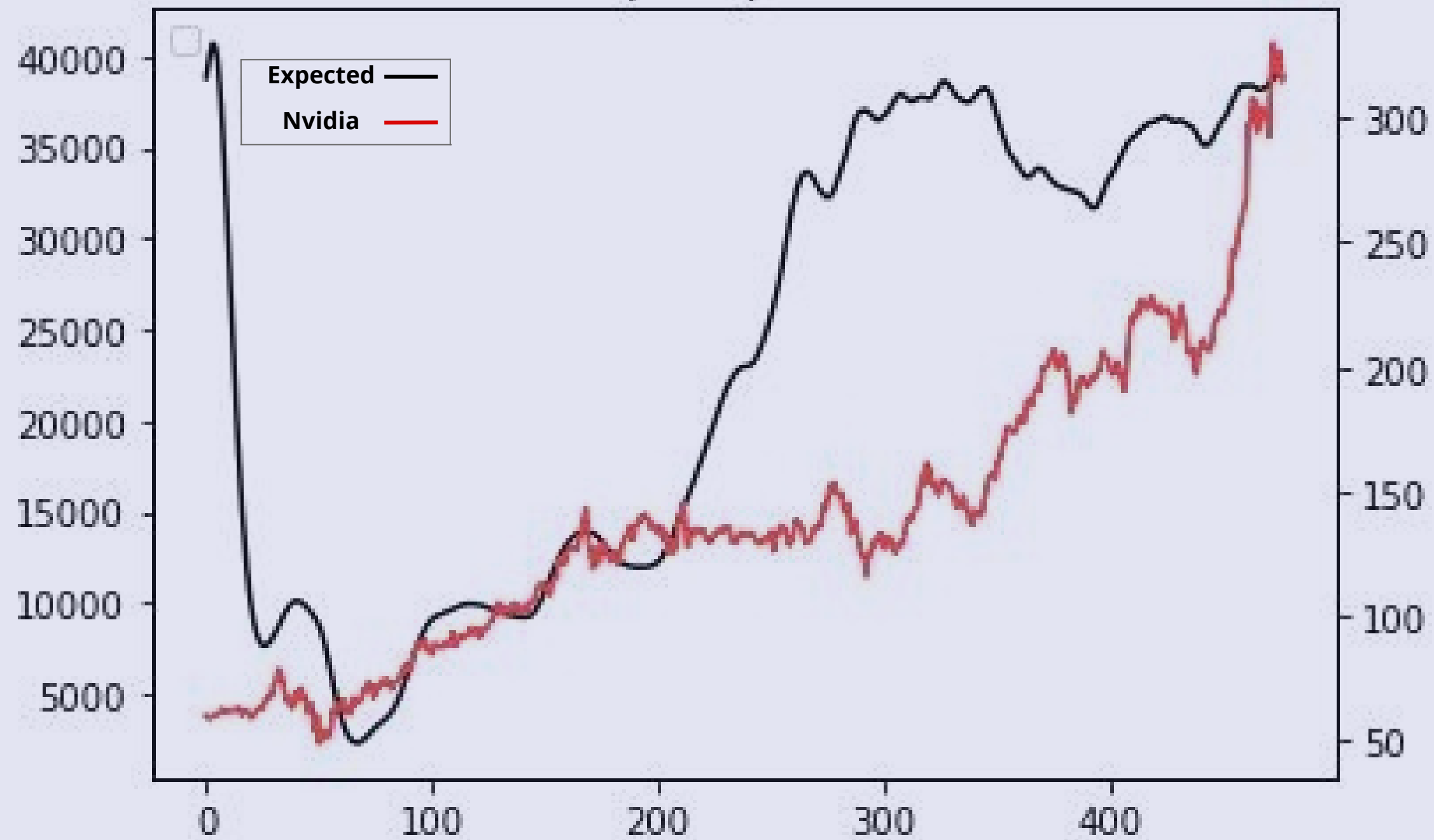


lstm_4	LSTM	input:	(None, 60, 50)
		output:	(None, 60, 50)



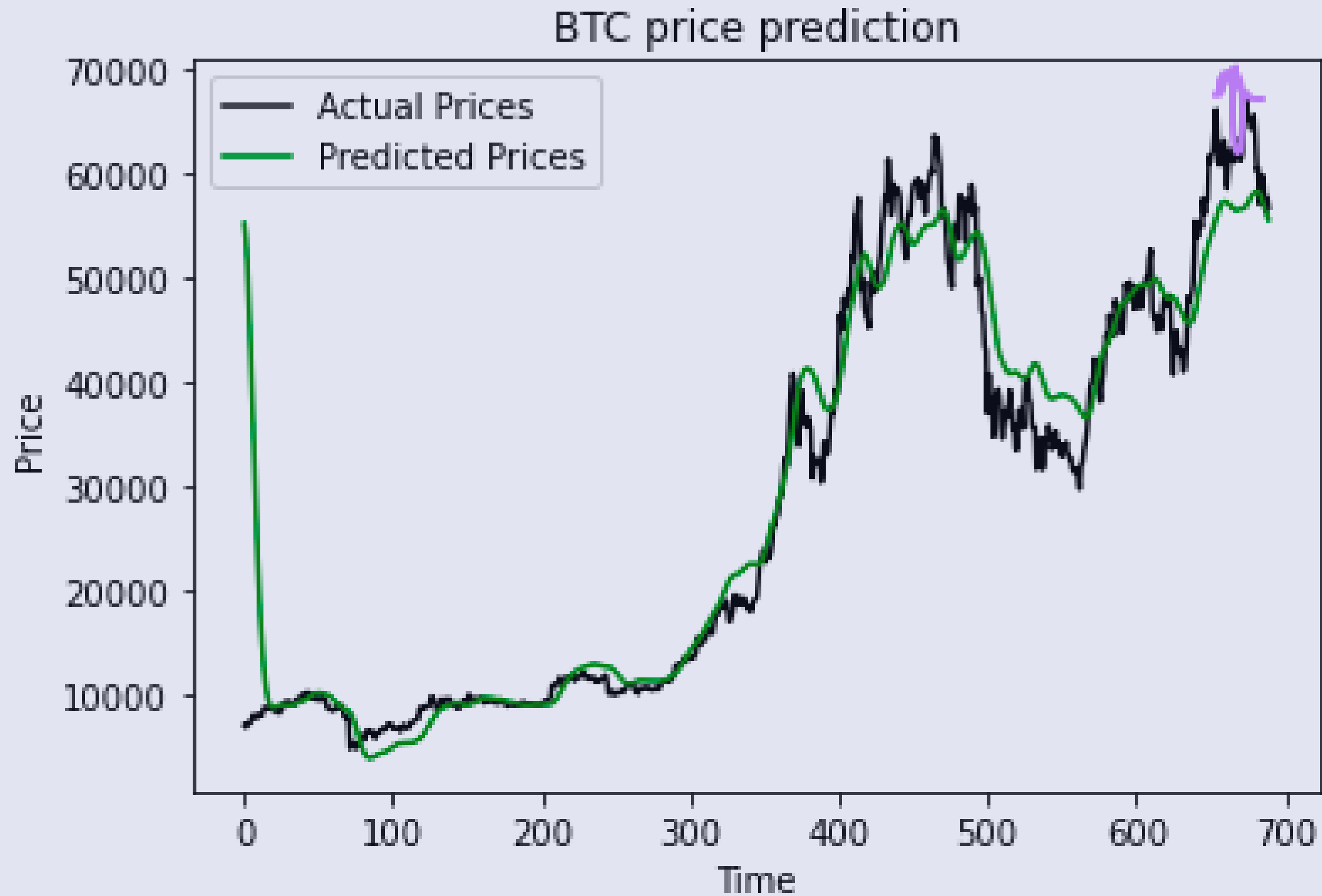
# *The Result*

BTC price prediction





# *Predictions (BTC Only)*



# Feedback & QUESTIONS

## **Feedback :**

- *The model run better on GPU rather than CPU.*
- *Lebal the graph.*

## **Questions:**

- *So using bitcoin's close prices is better than using bitcoin and envidea together?*
- *Why you choose 25eboch ?*
- *Can you use another cryptocurrency with same model ?*

THANK  
YOU!