Crypto price prediction

Team members:

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Our Motivation:

The goal of our project is to predict crypto price with machine learning algorithms. Since the pandemic, crypto has gone viral all over the internet. And the prices of cryptos have also gone up crazy. We have heard some of our friends earned thousands of dollars, while some of them lost their money after they went into the market. Therefore we want to know if we are capable of predicting the prices of crypto to avoid lose our money in the market.(or make money if possible) Although the prices of crypto are fluctuating due to the news, the policies and many other political factors in the long term, predicting crypto prices in the short term is still practicable. Therefore, we want to examine the possibility and practicality of predicting crypto prices using machine learning algorithms.
Since machine learning is the practice of teaching computers how to learn patterns from data, it's useful for making predictions. With machine learning techniques, we could predict the approximation of the price range for the crypto. Also, since our dataset has information of trade volume and time, we could also predict the amount of trading.

Data/Data Plan:

Our dataset contains all the 1 hour historical data from 2020-05-12 - 2018-10-16, this dataset contains 7 columns including Unix Timestamp, dates, opening price, high price, low price, closing price, trade volume. We plan to use all features of our data since they are all important for the prediction. We have 13760 observations in our dataset which is already available to us.

References:

LiteCoin historical dataset
https://www.kaggle.com/prasoonkottarathil/litecoin-historical-and-tradeprint-dataset

Crypto historical prices dataset
https://www.kaggle.com/sudalairajkumar/cryptocurrencypricehistory