CRYPTO MANAGER

Adham, Andrew, Omar, Marwan, and Abdulrahman

Supervisor: Dr. Samar Hesham

Abstract

Cryptocurrencies are getting more relevant than ever in the financial and trading world and is considered as a new emerging market. This has encouraged investors from all over the world to enter this field. The investment in cryptocurrency has been proven more difficult than the normal stock market due to its high volatility and unpredictable nature of its market. So as result investors are constantly searching for ways to minimize risk and maximize the profit from investing. One such way is using AI and DSS to help the investor to make a decision based on data history of cryptocurrencies.

Introduction

Since cryptocurrencies have the potential to be extremely detrimental to society, it is essential to understand the primary motives of the project that we are doing. The blockchain technology underlying bitcoin and other cryptocurrencies has been hailed as a potential gamechanger for a large number of industries, from shipping and supply chains to banking and healthcare and this is our way of approaching a solution to the problem of having a lack of knowledge about the field by providing a user friendly prediction system that helps tackle this problem

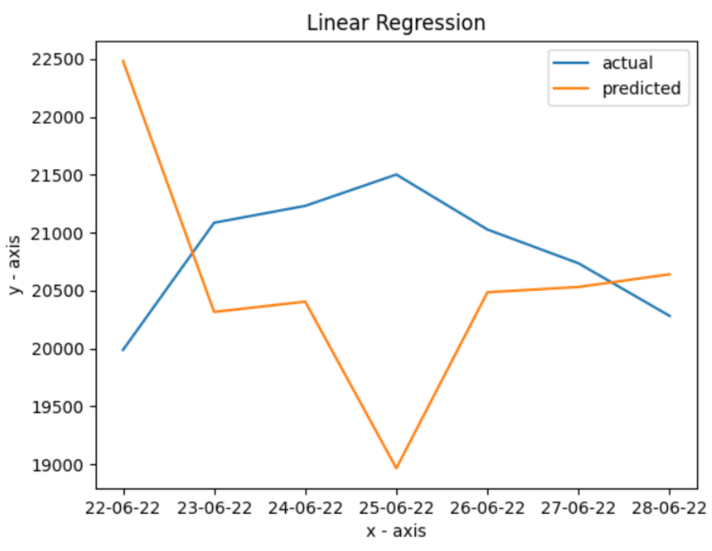
Methods

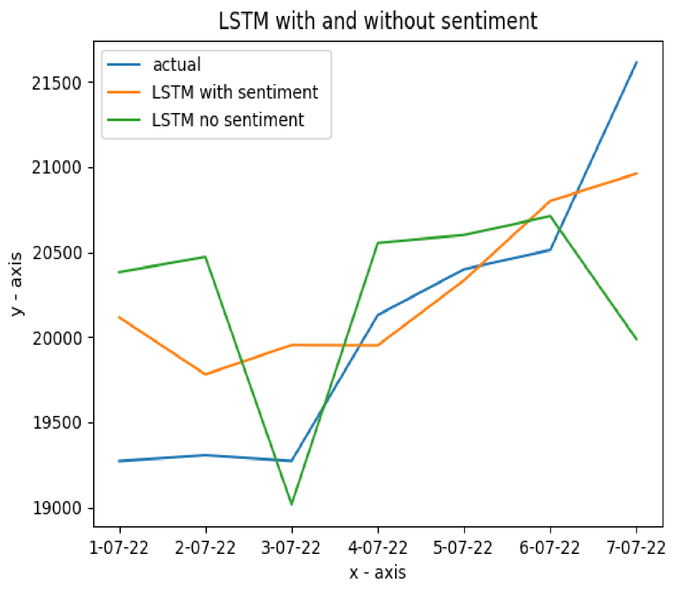
We made a live simulation to a real trading environment and this is a safe approach which helps new users to trade freely and gain more knowledge about cryptocurrencies without risking their actual money while doing it

In this project we uses LSTM(Long Short Term Memory) LSTMs are widely used for sequence prediction problems and have proven to be extremely effective. The reason they work so well is that LSTM can store past important information

We also used flask-sql alchemy is the Python SQL toolkit and Object Relational Mapper that gives application the flexibility of SQL we used it in the backend database implementation to be able to deal with it using python functions

LSTM with sentiment final result





Primarily Design

We first compared traditional machine learning algorithms like linear regression and SVM for prediction of coins prices and then they gave poor results as shown in the figures above so then we decided to move on to the LSTM sentiment analysis which later gave much better more accurate results

Conclusion

In conclusion we aim to solve the problem of the lack of knowledge about cryptocurrencies and raise more awareness about how important it is becoming nowadays through our system which helps predict the crypto currencies prices accurately as we conducted a traditional machine learning algorithm used in time series forecasting and LSTM with sentiment analysis which performed way better and gave better more accurate predictions

Contact us: cryptomanageragent@gmail.com