Abstract

Dogecoin is a cryptocurrency that was created by Billy Markus and Jackson Palmer, but they created Dogecoin only to be made fun of in the cryptocurrency world. This final project analyzes sentiments and predictions for Doge by correlating Doge prices with data collected from social media Twitter about Doge. This research was conducted using the opinions conveyed by social network users who use English. The method used is LSTM with reference to previous studies which show that LSTM provides the highest accuracy. The data used in this study are doge and tweet prices in the January-April 2021 period. Determining the correlation between doge and tweets is done by Pearson correlation where the results of the correlation determine positive correlation, negative correlation and no correlation, after that doge close price prediction is carried out with LSTM. The Doge Close price is correlated with sentiment, but neither strong nor weak. There is no increase in the accuracy of the prediction results compared to the first test where the RMSE value in the first test was 0.003 and in the second test the RMSE value was 0.008.

Keywords: sentiment analysis, long short term memory, predictions, correlation