

IMPLEMENTATION OF ARTIFICIAL NEURAL NETWORKS TO PREDICTE CRYPTOCURRENCY PRICES

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ABSTRACT

Cryptocurrency has become an important element in the global financial market, thus encouraging investors' interest in predicting prices for the purpose of making the right investment decisions. In this study, we will apply the Artificial Neural Network (ANN) algorithm to predict cryptocurrency prices. This method is based on the ability of ANN to recognize complex patterns and trends in historical cryptocurrency price data. This report presents an analysis and interpretation of the results of cryptocurrency price prediction, aiming to examine the implementation of artificial neural network algorithms in predicting cryptocurrencies. By identifying key factors that influence price fluctuations, it can be explained how the ANN model can provide a deeper understanding of the cryptocurrency market tram. The results showed a significant level of accuracy for three types of crypto, namely BTC (86.86%), BNB (96.8%), and Doge (97%). The predicted values of the results of this study, namely BTC of \$ 4306, BNB of \$ 58.7, and Dogecoin of \$ 0.037 using the LSTM artificial neural network algorithm. This implication highlights the critical role of the number of epochs in influencing the performance and accuracy of cryptocurrency price predictions.

Keywords: *Artificial neural network, prediction, accuracy, cryptocurrency.*