

ABSTRACT

Electrical energy is essential for life today. Many daily activities use electricity. The price of electricity is measured by how much electricity is used. Forecasting the price or amount of electricity consumption is needed to be able to make decisions to save money and manage expenditure management.

In the development of technology, there are many applications of Machine Learning that can be used to forecast or predict future prices or data. One of the algorithms that will be used is Long Short Term Memory (LSTM).

This study aims to be able to make a prediction system for electricity use using the LSTM algorithm to be able to predict future electricity use. This research will be implemented in the form of Website System Monitoring and Prediction media.

Based on the test results, it is known that for the LSTM method with a training and testing ratio parameter of 70:30, an epoch of 250, the number of Hidden Layers is 3 LSTM layers with 64 neurons in each layer, and the Adam optimization type with a learning rate of 0.001 produces predictive results. a good one with MAE 0.0240619, MSE 0.0194829, RMSE 0.139581.

Kata Kunci: *LSTM, Electricity Consumption, Website System Monitoring and Prediction.*