Abstract

Recently the development of technology is growing fast. It also has a positive impact to economic issues. Trading at international scale has developed in Indonesia and most of it uses US Dollar. Unstability in exchange rate of US Dollar to Rupiah can influence an economy activities in Indonesia. Because of that, system, which can be used to predict exchange rate of US Dollar to Rupiah, is needed. These are some methods that can be used to predict, for example *Average, Moving Average, Single Exponential Smoothing, Double Exponential Smoothin*g, etc. Effort to get an accurate prediction has been done, one of them by using *Genetic Algorithm* and *Elman Recurrent Neural Network.*

This final project will discuss about exchange rate prediction of US Dollar to Rupiah using *Genetic Algorithm* and *Elman Recurrent Neural Network.* Genetic Algorithm is used to determine an optimal architecture of artificial neural network. Elman is used to predict exchange rate of US Dollar to Rupiah for a next day.

Based on the result of this final project, these are some factors that influence accuracy of prediction result, such as acrhitecture of artificial neural network, learning rate, and epoch.

Keyword: prediction, exchange rate, Genetic Algorithm, Elman Recurrent Neural Network**.**