Abstract

Stock Index Futures is an index that contains of chosen stocks registered on a market calculated based on Market Capitalization or Price Weighted. This index has a function as an indicator or barometer of general economic health of a nation. Therefore, that index based measured contract allows investor to buy/ sell a measured fixed contract of that index with current price for future date of payment.

Method that is used in this final project is Backpropagation Bayesian Regularization method to model JST architecture, which will be used to predict stock value on a period of time.

Data that will be used in training, testing and predicting is Dow-Jones Industrial Average (DJIA) closing values from 1900 to 1993.

The result of the testing is that JST Backpropagation Bayesian Regularization architecture model is more accurate and faster than JST Backpropagation Adaptive Learning Rate architecture model.

Key Word : *training, testing, predicting, Backpropagation Bayesian Regularization, Backpropagation Adaptive Learning Rate, Learning rate, Levenberg-Marquardt (MU).*