

Abstract

Forecasting is a study of historical data to discover relationships, trends and systematic pattern. The first task of forecasting is to find the cause and effect relationships by observing the output sistam (either by time or by studying examples that represent a similar system) and connect it with the relevant input.

GRANN ARIMA (Grey Relational Artificial Neural Network Autoregressive Integrated Moving Average) is one method of forecasting which combines the methods of artificial intelligence with statistical methods. Residues of the ANN will be used as input for the ARIMA.

This final assignment is implented using Matlab and calculation accuracy and error rate will be measured based on the results achieved.

Keywords: forecasting, time series, Grey Relational ANN, ARIMA, GRANN ARIMA