Abstract

The stock price has changed rapidly over time . The movement of the stock price index is the benchmark for the investors to make a decision when the stock should be sold or retained . So we need a model that can predict stock price index to monitor the movement and help investors in making decisions . This paper proposes two stage fusion approach for predicting the movement of stock prices involving Support Vector Regression (SVR) in the first stage and Artificial Neural Network (ANN) in the second stage . In this paper , Genetic Algorithm will be used to identify the optimal solution of choosing best parameter of SVR . The predictions are made for 1 , 3 , 5 , 7 , 10 , 15 , and 30 days in advance. From a series of experiments, it can be concluded SVR - JST (SVR optimized GA) gives the error rate is smaller than the ANN model.

Keywords : Stock Price, Hybrid Models, Genetic Algorithm, Support Vector Regression, Artificial Neural Network