Neural-Fuzzy Systems in Stock Prices Forecasting

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ABSTRACT

Forecasting of stock market is one of the most important topics in business. The ellipsoidal fuzzy systems learning with and without supervision has been successfully applied in control systems and pattern recognition problems. In this study, the ellipsoidal fuzzy system is modified to examine the feasibility for predicting stock prices. A scale conjugate gradient learning method is borrowed to speed the training process in supervised learning. Three existing forecasting approaches are used to compare the performance. Numerical results show that the ellipsoidal fuzzy system outperforms the other three methods in forecasting stock prices.

Keywords : ellipsoidal fuzzy systems, stock prices, scale conjugate gradient, supervised learning,

Table of Contents

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