Abstract

Stock market Prediction is an example of a prediction problem which is challenging due to small sample sizes, high noise, and non-linearity. Neural networks (NN) have been frequently used in stock market prediction because of their ability to deal with uncertain, or insufficient data. Group Method of Data Handling (GMDH) is an inductive approach which attempts to overcome the limitations of neural networks based on the principle of self-organization. We have developed an algorithm based on the evolutionary manner of conventional GMDH NN to generate inductive model that can avoid some of GMDH problems like the exhaustive computations on candidate Adalines and the increasing number of Adalines in the following layers. The developed method is applied for stock market prediction. Simulation results are presented to demonstrate the capability of the proposed method for accurate prediction.

References

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Index Terms

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