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Abstract
Stock investment has become one of the major financial instruments for business and individual investors these years. Because of its high earning rate, stock is one of the most popular investment targets for many investors. The stock market is a dynamic and variational environment. Behind the high earning rate, there exists high risk. Therefore, if investors do not have proper investment tools, they will be overwhelmed by too much information and can’t make a correct decision.
In order to gain more return, many researches about stock investment have been used to get the fluctuation of stock price. However, so many factors subtly affect stock price. It is hard for people to predict stock price.With the progress of information technology, it is more and more popular to use IT in the real life. Computer science and artificial intelligence can assist us to process aplenty information and provide a most powerful decision support tool.
Accordingly, this study integrates 12 technical indexes and uses rough set theory and genetic algorithm to construct a stock trading forecasting model. The experiment is based on a sample of TSMC on the Taiwan Stock Exchange. Data are collected from January 2, 2003 to December 29, 2007. The searching period is from 2003 to 2006, the testing periods are from January 2, 2007 to April 30, 2007 and September 3, 2007 to December 31, 2007.The empirical result shows that the forecast System have the ability of earning money. The technical analysis is worth understanding, and investor should not take of the common technical indicators as the best trading rules.
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