

Abstract: Stock Forecasting using Stock Index Relation and Genetic Algorithm

Wonil Kim¹, Changhee Han², Kangseok Kim³, Jai-Hoon Kim⁴, Yeongjoon Kim⁵, and Chuleui Hong^{5,*}

¹ *Department of Digital Contents, Sejong University, Seoul, Korea*
wikim@sejong.ac.kr

² *School of Electronic Information, Korea Military Academy*
chhan@kma.ac.kr

³ *Department of Knowledge Information Security, Ajou University, Suwon, Korea*
kangskim@ajou.ac.kr

⁴ *Graduate School of Information and Communication at Ajou University*
jaikim@ajou.ac.kr

⁵ *Department of Computer Science, Sangmyung University, Seoul, Korea*
{hongch, yjkim}@smu.ac.kr
+82-2-2287-5313, {hongch, yjkim}@smu.ac.kr

Abstract

The present study proposes a method that finds the relations among different stock indexes expressed in linear combination and forecasts the fluctuation of stock prices. What is important in the proposed method is to select stock indexes related to the index to be forecasted and to define the relations between them. Because it is impossible to define the relations with all stock indexes, we used only closely related stock indexes, and applied genetic algorithm to find the relations among the stock indexes. When a simulated investment was made with actual stock indexes during the period from 2005 to 2007, the return on the investment was increased by 230% using the proposed method.

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