結合粗略集合論、支援向量機及最佳化演算法於財務系統之應用

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摘 要

以股票股價分析而言，目前有許多關於股價分析的研究。其目的為使投資者有更多的資訊以進行決策分析。技術指標為股價走勢分析方法之一種。為了解決因技術指標所造成資料分析的困難以及維持資料分類規則的準確性，本研究主要目的是利用粗略集合論(Rough Set Theory)結合支援向量機(Support Vector Machines)作為決策分析的工具，以處理股價的不確定性問題，並建立資料間之相關性以作為決策之依據。針對粗略集合論中屬性值屬於連續數值的處理問題，本研究將利用自組織映射圖網路(Self-organizing map, SOM)對每一個屬性進行分群，並用替代值取代先前的數據。此外，粗略集合論所產生的決策規則於結合支援向量機後，使決策規則做調整，將會產生明確的決策指標。研究針對技術指標分析能力的不完整，利用粗略集合論結合技術指標使用方式，使投資者明確地知道股價漲跌幅度。

關鍵詞 : 粗略集合 ; 技術指標 ; 自組織映射圖網路 ; 支援向量機

目錄

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