

模糊類神經系統於股市股價預測之應用

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摘要

橢圓形模糊系統(ellipsoidal fuzzy system, EFS)為一可加模糊系統(additive fuzzy system), 具有非監督式(unsupervised)學習與監督式(supervised)學習之功能, 此模式已成功的應用於控制系統與型態辨識(pattern recognition)問題之研究。本研究將以橢圓形模糊系統為基礎, 利用可加模糊系統對不確定問題之趨近(approximating)能力, 並以非監督式群聚(clustering)資料與監督式調整(tune)資料的特性, 採用共軛梯度(scale conjugate gradient)之監督式學習法則, 以預測股票市場之股價, 結果顯示橢圓形模糊系統於預測短期股價表現較其他三種現有之方法好。

關鍵詞: 橢圓模糊系統, 可加模糊系, 非監督式學習, 監督式學習, 共軛梯度學習法。

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