

應用蟻群最佳化於資料相關結合

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摘要

追蹤目標物在雷達系統中，是一項極為重要的工作。藉由追蹤技術，可以瞭解目標的位置、動態等資訊，將偵測模組求得之訊號，分析出完整的目標物，並求得於連續的動態中彼此對應的關係，以達到追蹤的目的。其中又以資料相關結合技術、變速度之偵測與修正系統參數的數學運算為決定追蹤效果與精確度之最主要的關鍵。

本文中，嘗試用蟻群最佳化(Ant Colony Optimization)結合資料結合技術，配合卡門濾波器當作其適應性變速度的補償，來建立一套系統化的目標追蹤模式。經由這個方式，有效地改進其系統的準確。

關鍵詞：資料相關結合技術、蟻群最佳化

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