

應用競爭式類神經網路於圓形軌導追蹤之研究

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摘要

在本論文裏，為了追蹤多量的變速度目標，發展一個新的追蹤模式。而這個演算法則，是用競爭式類神經網路(Competitive Hopfield Neural Networks)結合資料結合技術，去作執行運算，配合一系列的卡門濾波器當作其適應性變速度的補償。經由這個方式，資料結合和目標變速度問題，也就能同時地被解決。並且為了驗證這種形態的追蹤形態能被真正地改善，使用兩種追蹤演算法則及許多的飛行狀況去對多目標追蹤做詳細的模擬。電腦模擬結果顯示這種方法是成功的，同時目標物有更好的性能。

關鍵詞：資料相關結合技術，競爭式類神經網路，圓形軌道追蹤

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