

使用平行模擬退火法於功能性核磁共振造影影像分析之研究

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摘要

本研究使用平行模擬退火法，針對功能性核磁共振造影產生的影像加以分析，嘗試找出正確的活化區位置，而績效評估方式採用繪製ROC (Receiver Operating Characteristic) 曲線，其標準範本由電腦模擬產生，並與兩樣本t 檢定法、二個數列的交互相關係數 (Cross-Correlation Coefficient)、線性組合(Linear Model)、及一般的線性組合(General Linear Model)等方法加以比較。功能性核磁共振造影為一種具非侵入性功能影像工具，可用來研究腦部功能與不同的感官、運動神經、及認知作用上的相關性，也可用來精確分辨腦瘤是否侵犯重要神經功能區，藉以當作醫師臨床開刀之依據。

關鍵詞：功能性核磁共振造影影像；平行模擬退火法；ROC曲線

目錄

[目錄] 第一章 緒論	1
1.1 研究背景與動機	1
1.2 研究目的	4
1.3 研究範圍	5
1.4 研究重要性	5
1.5 研究案例	6
1.6 研究流程	8
第二章 文獻探討	12
2.1 功能性核磁共振造影影像分類之相關研究	12
2.2 模擬退火法於分類上之相關研究	14
2.3 平行模擬退火法之相關研究	15
第三章 平行模擬退火法	17
3.1 模擬退火法	17
3.2 模擬退火法程序	21
3.3 平行環境的介紹	26
3.4 電腦叢集的介紹	27
3.5 平行演算法模型	30
3.6 平行模擬退火法架構(1)	31
3.7 進行平行模擬退火程序(1)	33
3.8 平行模擬退火法架構(2)	34
3.9 進行平行模擬退火程序(2)	35
第四章 績效評量方法	37
4.1 功能性核磁共振造影影像取樣	37
4.2 影像前處理	39
4.3 績效衡量	41
4.4 雜訊比以及面積比設定	44
4.5 臨床實驗	44
第五章 實驗結果與分析	45
5.1 實驗流程	45
5.2 實驗架構	46
5.3 實驗資訊	47
5.3.1 ROC曲線分析	48
5.3.2 模擬退火法參數設定	48
5.3.3 模擬退火法初解實驗	49
5.4 各類模擬退火法比較	52
5.5 不同分類方法的比較	52
5.6 雜訊比的影響	55
5.7 激發區面積比實驗	58
5.8 平行模擬退火法實驗環境	60
5.9 平行架構的比較實驗	62
5.10 平行模擬退火法比較實驗	64
5.11 平行模擬退火法在不同雜訊比下的比較實驗	66
5.12 平行模擬退火法在不同面積比下的比較實驗	68
5.13 臨床資料的實驗	71
第六章 結論	76
6.1 結論	76
6.2 未來展望與建議	77
參考文獻	79

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