基於差值擴展和直方圖位移之內容基礎式可逆資料隱藏法則

陳怡菁、林國祥

E-mail: 9805515@mail.dyu.edu.tw

摘 要

資料隱藏是一種可用於秘密通訊的技術。意即，秘密資料被嵌入於掩蔽媒體，並且不易於判斷秘密訊息是否存在。在一些應用中，例如，醫學和軍事影像，資料隱藏產生之永久性誤差是不被接受的。因此，提供我們發展可逆資料隱藏法則之動機。為了達成不可察覺性和盲取出性，差值擴展方法被加以修改並與直方圖位移方法進行整合。此修正後之差值擴展法則中，亦考慮影像局部特性決定每個係數之嵌入資料量，以提昇整體嵌入量。

為了評估本論文提出之資料隱藏法則，若干常見之影像被選取進行實驗。實驗結果證明，與Tian學者的方法比較，本論文所提出的資料隱藏方法能夠得到較高的PSNR與NQM。

關鍵詞 : 資料隱藏、可逆資料嵌入、差值擴展

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