

降低JPEG2000漣漪假像之研究

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摘要

中文摘要 不論是使用何種失真壓縮技術，都會產生不同的假像效應，只是在不同的壓縮倍率下，所呈現的假像效應在視覺上的程度多寡，當壓縮倍率越高呈現的假像效應的感覺會越明顯，從早期以離散餘弦轉換為基礎的JPEG影像，到現在以小波轉換為基礎的JPEG2000，都會產生不同的假像效應，JPEG會形成方塊效應，JPEG2000則會造成漣漪假像，常見的處理方式可以分成前處理和後處理技術。在本篇論文中我們提出兩種方法，一個不需要再處理前先偵測影像邊緣，另一個先經過偵測影像邊緣的處理步驟，再依所偵測出的影像邊緣為處理基準，經過我們所設計的方法處理過後的壓縮照片，不但其視覺化效果可以大幅的提升，而且可以有效的提昇影像的訊號雜訊比。

關鍵詞：漣漪假像；小波轉換；JPEG2000；後處理；邊緣偵測

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