

# 近似無失真及無失真影像編碼之研究

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## 摘要

在本論文的研究中，主要分為兩個部分，其一在有失真的編碼方式中提出一個簡單邊緣預測的多階大區塊方法並結合傳統的AMBTC (Absolute Moment Block truncation coding)，經由我們實驗的結果得知加入邊緣預測的方法比傳統AMBTC方法在相同的位元率下，其影像品質有大幅的提升。其二在近似無失真及無失真的壓縮方式中提出一種新的方法可以有效的降低原本誤差訊號編碼(DPCM)後所需產生的非負數列。另外，我們提出一個有別於JPEG-LS所使用的預測編碼方式，在我們的實驗中發現，我們所提出的方法比JPEG-LS所提出固定預測器的方法，在誤差訊號編碼中有較佳的表現。

關鍵詞：AMBTC；誤差訊號編碼；JPEG-LS

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