

使用秘密機率表之JPEG2000影像加密演算法

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摘要

隨著數位化時代的來臨與網際網路的高速發展，許多影像資料逐漸的數位化並在日常生活中廣泛的使用，由於數位影像容易透過網際網路取得，因此產生許多數位影像的安全問題。JPEG2000(Joint Photographic Experts Group 2000)是新的靜止影像壓縮標準，提供有損與無損的壓縮方式，能夠更好地保存影像，因此被廣泛的應用例如醫學影像、軍事影像與遙測影像等。本篇論文提出一個針對JPEG2000壓縮演算法的數位影像加密技術，在提出更高的計算安全度下，同時也不會對JPEG2000硬體造成太大的修改，並且在加密數位影像時也能兼顧數位影像的壓縮率。

關鍵詞：JPEG2000壓縮演算法、Qe機率表、最佳切割嵌入式區塊編碼、MQ算術編碼、RC4演算法

目錄

封面內頁	簽名頁	中文摘要	iii	ABSTRACT	iv	誌謝	v	目錄	vi	圖目錄	viii	表目錄	x	第一章 緒論	1	1.1 前言	1	1.2 研究背景	3	1.3 研究目的	5	1.4 論文架構	5	第二章 相關技術	6	2.1 JPEG2000	6	2.2 最佳切割嵌入式區塊編碼	8	2.2.1 有意義點判斷程序	10	2.2.2 數值增量點判斷程序	10	2.2.3 清除的程序	10	2.3 MQ編碼器	11	第三章 提出之方法	18	3.1 產生子金鑰	22	3.2 建立秘密機率表T	23	3.3 使用秘密機率表T進行編碼	24	第四章 實驗結果分析與探討	26	4.1 不同b值對JPEG2000壓縮加密演算法的影響	30	4.2 複雜度測試	33	4.3 安全度測試	33	4.4 漸進式壓縮技術	38	第五章 結論與未來研究方向	40	5.1 結論	40	5.2 未來研究方向	41	參考文獻	42
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