



Chapter

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Image Steganography Optimization Technique

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Abstract

This paper presents a novel steganography technique which combines Discrete Cosine Transform (DCT) and Least Significant Bit (LSB). The objective is to maximize the capacity and invisibility of the secret image with minimal modification to the cover image (at most k -bits per block). The secret image is transformed to frequency domain using DCT. An algorithm is employed to construct the optimum quantization to embed the DCT coefficients in k -bits. The k -bits are then hidden in the LSBs of the cover image. The performance (capacity and peak signal-to-noise ratio) of the proposed method is compared with LSB.

Keywords

Steganography Image Processing Quantization

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