A Discrete Wavelet Transform: A Steganographic Method for Transmitting Images

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Abstract

Steganography is the art of hiding private or sensitive information within a carrier that for all intents and purposes, appears safe. The main objectives of Steganography’s are undetectability, robustness i.e resistance to various image processing methods and compression and capacity of the hidden data. Based on this factors steganography separates from related techniques such as watermarking and cryptography. In this paper a new Steganographic method for transmitting images based on discrete wavelet transform is proposed using technique 3-level wavelet decomposition. In this technique taking the single plane of cover image for embedding and processing the image as 4x4 blocks with swapping. The proposed method increasing the secret image capacity and security level of the data with maximum value of PSNR and minimum value of RMSE.

References


Index Terms

Computer Science

Image Processing

Keywords
Discrete Wavelet Transform, Peak Signal to Noise Ratio, Steganoanalysis and Steganography.