

## Error Analysis of Wavelet-Based Image Steganography Scheme

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**Abstract :** In this paper, a steganographic scheme for digital images using Integer Wavelet Transform (IWT) is proposed. The cover image is decomposed into wavelet sub bands using IWT. Each of the subband is divided into blocks of equal size and secret data is embedded into the largest and smallest pixel values of each block of the subband. Visual quality of stego images is acceptable as PSNR between cover image and stego is above 40 dB, imperceptibility is maintained. Experimental results show better tradeoff between capacity and visual perceptivity compared to the existing algorithms. Maximum possible error analysis is evaluated for each of the wavelet subbands of an image.

**Keywords :** DWT, IWT, MSE, PSNR

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