Colour Image Steganography Using SHA-512 and Lossless Compression

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ABSTRACT

This paper introduces a colour image steganography that enhances the existing LSB substitution techniques, improve the security level of hidden information and increase embedding capacity of hidden-data. Lossless image compression technique will be utilized to compress secret information and Hash-function is used to hash the hidden information. Hash-function will be executed in the stego-image and its values will be stored in the host-image for further checking during extraction process. The proposed method demonstrates significantly improvement in terms of information security, embedding capacity and quality.

Keywords: Steganography, LSB, PSNR, hash function, image compression

Computing Classification System: I.4