Abstract

Steganography is one of the most powerful techniques to conceal the existence of hidden secret message inside a cover medium like image, video, audio, etc. An image is a suitable cover object for steganography because of its great amount of redundant spaces and its abundance. This paper represents a secure steganography scheme which incorporating discrete wavelet transform (DWT) and the stability of the singular values with logistic map-based encryption. In this proposed scheme first of all, the secret image has been encrypted using the logistic map. The encrypted image is added to singular value of original image after two-level DWT to form the stego-image. In this paper the Peak Signal to Noise Ratio (PSNR), correlation coefficient (CR) are used to evaluate the transparency and security of algorithm.

References


10.5120/ijca2017913687

{bibtex}2017913687.bib{/bibtex}
Efficient Steganography Scheme based on Logistic Map and DWT-SVD

Proceedings of the Fifth Annual Information Security South Africa Conference (ISSA), Sandton, South Africa. June/July 2005


Index Terms

Computer Science

Security

Keywords

Steganography, DWT, SVD, Chaotic map, Logistic Map