High Secure Data Hiding Using Cropping Image and Least Significant Bit Steganography

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Abstract : This paper presents a high secure data hiding technique using image cropping and Least Significant Bit (LSB) steganography. The predefined certain secret coordinate crops will be extracted from the cover image. The secret text message will be divided into sections. These sections quantity is equal the image crops quantity. Each section from the secret text message will embed into an image crop with a secret sequence using LSB technique. The embedding is done using the cover image color channels. Stego image is given by reassembling the image and the stego crops. The results of the technique will be compared to the other state of art techniques. Evaluation is based on visualization to detect any degradation of stego image, the difficulty of extracting the embedded data by any unauthorized viewer, Peak Signal-to-Noise Ratio of stego image (PSNR), and the embedding algorithm CPU time. Experimental results ensure that the proposed technique is more secure compared with the other traditional techniques.

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Keywords : steganography, stego, LSB, crop

Conference Title : ICIPACV 2016 : International Conference on Image Processing, Analysis and Computer Vision

Conference Location : Istanbul, Türkiye

Conference Dates : February 15-16, 2016