

Abstract Details

Title: DWT & AES based CRYPTO-STEGO Technique

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Abstract: This paper discusses an algorithm that the message will be encrypted and the encrypted message will be hidden in to the transformed image. This will improve the PSNR value and the imperceptibility will also get improved. The cover image will be decomposed by taking the DWT of the cover image. The secret message is encrypted by using the AES algorithm. Then the encrypted message is hidden in to the cover image. The encrypted message is hidden in to the approximation part and the diagonal detailed part of the cover image. The MSB of the R, G and the B block is collected and converted in to a decimal value. If MSB contains two or more 1's in HH part or the MSB contains two or more 0's in the LL part then the MSB is ignored. It means no message will be hidden in such MSB. Otherwise if the bit at the decimal position in the B component is similar to the message bit then the LSB of the pixel will remain same otherwise complemented. The process is repeated until the whole message is stored in to the cover image.

Keywords: Cryptography, Steganography, AES, DWT.