

HIGHLY SECURE IMAGES STEGANOGRAPHY TECHNIQUES BASED ON LSB, X-BOX MAPPING AND HUFFMAN ENCODING

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ABSTRACT

In advanced correspondence, everyone needs high insurance from unapproved client. For information security, numerous information concealing strategies are accessible that fundamental part is to secure our private/important data from unapproved client. Steganography is an information concealing procedure that conceals data in such a route, to the point that nobody can without much of a stretch discover that presence of the data stowed away. LSB is a spatial Domain method. This paper presents a novel image Steganography method using X-Box Mapping and Huffman Encoding. Here two 8 bit gray scale images used of different sizes are utilized as cover image and secret image separately. Basically secret image is not directly inserted into cover image; first to applied Huffman Encoding on the secret image to increase security. Here we have utilized a few remarkable X-boxes with sixteen separate values. In this calculation, we have utilized four exceptional X-boxes with sixteen separate values and each one worth is mapped to the four bits of Huffman code stream of secret image. At that point utilizing LSB replacement, mapped bits are reinstated with Cover Image. The trial consequence indicates that the calculation has a high installing limit and great imperceptibility. These techniques to provide improve PSNR of stego image compare to other existing Steganography approaches. Additionally, these methods provide high Security so, no one can easily extract secret message from stego image without knowing this method and Huffman Table.

KEYWORDS: Steganography, LSB, X Box, Huffman Encoding