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More Secure Images Steganography Techniques Based on Encryption

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Abstract: *In advanced correspondence, everyone needs high insurance from unapproved client. For informationsecurity, 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 thatconceals 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 paperpresents a novel image Steganography method using X-BoxMapping 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 utilizeda 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 pointutilizing 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 ofstego 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, DCT

REFERENCES

[1]. Amitava Nag, Saswati Ghosh" An Image Steganography Technique using X-Box Mapping"IEEE-International Conference On Advances In Engineering, Science And Management (ICAESM -2012) March 30, 31, 2012.
[2]. Tanmay Bhattacharya, Nilanjan Dey, S. R. Bhadra Chaudhuri " A Session based Multiple Image Hiding Technique using DWT and DCT", International Journal of Computer Applications (0975 – 8887) Volume 38– No.5, January 2012.
[3]. V. Nagaraj, Dr. V. Vijayalakshmi, Dr. G. Zayaraz " Modulo based Image Steganography Technique against Statistical and Histogram Analysis", IJCA Special Issue on "Network Security and Cryptography" NSC, 2011.
[4]. Er. Mahender Singh, Er. Rohini Sharma, Er. Dinesh Garg, "A New Purposed Issue for Secure Image Steganography Technique Based On 2-D Block DCT and DCT",ijarcsse, Volume 2, Issue 7, July 2012.
[5]. H S Manjunatha Reddy, K B Raja, "Hybrid Domain based Steganography using BPS, LSB and IWT". Ad International Journal of Computer Applications (0975 – 8887) Volume 54– No.3, September 2012.
[6]. RigDas, Themrichon Tuithung"A Novel Steganography Method for Image Based on Huffman Encoding" IEEE, 2012.
[7]. Ajit Danti, Preethi Acharya,"Randomized Embedding Scheme Based on DCT Coefficients for Image Steganography", IJCA Special Issue on "Recent Trends in Image Processing and Pattern Recognition" RTIPPR, 2010.
[8]. H S Manjunatha Reddy', N Sathisha, Annu Kumad, K B Raja," Secure Steganography using Hybrid Domain Technique" IEEE, July 2012.

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[9]. Y.K. Lee and L.H. Chen, "High Capacity Image Steganographic Model", IEEE Proceedings Vision, Image and Signal Processing, vol. 147, pp. 288-294, Issue 3, June 2000.

[10]. Jagvinder Kaur, Sanjeev Kumar "Study and Analysis of Various Image Steganography Techniques" IJCST Vol. 2, Issue 3, September 2011.

[11]. Alina-Felicia Drăgan "Another Steganographic LSB- based Function", IEEE,2012.

[12]. J K Mandai and madhumita Sengupta, "Authentication/ Secret Message Transformation through Wavelet Transform based Subband Image Coding (WTSIC)" International Symposium on Electronic System Design, pp. 225 - 229, 2010.