Abstract

Cryptography is the science of using mathematics to encrypt and decrypt data and Steganography is the art and science of hiding communication; a steganographic system thus embeds hidden content in unremarkable cover media so as not to arouse an eavesdropper’s suspicion. A novel scheme for the embedding data in images is CrypSteg in this method combined cryptography and Steganography process in one algorithm. First we encrypt the data and then embed with image with new Steganography algorithm. The method is very efficient especially when applied to those images whose pixels are scattered homogeneously and for small data. The given image is partitioned into four level blocks, and the data will be embedded into selected the four diagonal sub-blocks values depend upon key. This algorithm only requires fewer steps and it can embed data efficiently without discarding image. Embedding 4 bits information in a 4*4 pixel block need to change very less pixels on average. Furthermore, the quality of the produced stego-images is better than that of other methods. The quality of stego-image is greatly improved when this algorithm is used.

References
A New Approach of Data Hiding in Images using Cryptography and Steganography

- Hawi, T. A. ; Qutayri, M. A. ; Barada, H. ;, "Steganalysis attacks on stego-images..."
A New Approach of Data Hiding in Images using Cryptography and Steganography


**Index Terms**

Computer Science

Security

**Keywords**

Cryptography Steganography Security Data Hiding Quality Image