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Abstract

Steganography and Cryptography are two popular ways of sending vital and pivotal information in a secret way. But neither cryptography nor steganography alone can guarantee better security because they can be cracked after some efforts. So it is necessary to combine both cryptography and steganography to generate a hybrid system called as Crypto-Steganography. Cryptography is the art of saving information by encrypting it into an immersed format. On the other hand, steganography is the art and science of secret communication to send messages in a way which hides even the existence of the communication. This paper aims to improve a new approach of hiding a secret message in an image, by taking advantages of combining cryptography and steganography. Which using the Huffman coding to compress the message and RC4 algorithm to encrypt the secret message then the cipher text embedded in the cover image using Parity checker algorithm using blue layer only. The results showed that the proposed method gives better results of higher PSNR lower MSE.

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Index Terms

Computer Science

Security

Keywords

Cryptography, Steganography, Cipher text, Huffman Coding, Parity checker.