A Hybrid Chaos- Fuzzy -Threshold Steganography Algorithm for Hiding Secure Data

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Abstract— Security problem is an essential requirement for data transmission. Although the will known methods of data encryption attain certain security levels, they make the encrypted data unreadable, and unnatural, this attracts some unintended observer attention. So it is required to search for a higher security approach. The present paper introduces a new hybrid steganography algorithm to achieve a higher level of security. The proposed algorithm consists of a compound processing using Chaos – Fuzzy- Thresholding steganography method (CFT). Implementation of the proposed CFT hybrid algorithm shows a higher degree of security level. The hidden data reconstruction is based on an inverse CFT steganography algorithm processing.

Index Terms— Chaos, Steganography, Fuzzy, thresholding



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