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Authors:

Marghny H. Mohamed

Hussein I. Abul-kasim

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Abstract

Steganography is defined as the art and science of writing hidden in such a way that no one apart from the sender and the intended recipient even knows that there is a hidden message. One of the most important techniques of Steganography is the Least Significant Bit (LSB) which embeds the secret message in the host image. It is based on replacing the LSBs of the host-image with the secret message bits giving a stego-image. The proposed scheme consists mainly of two phases: In the first phase, we propose a hybrid data hiding scheme incorporates LSB technique with a key permutation method. While in the second phase, we proposed a new scheme for finding the optimal key-permutation by using gene expression programming (GEP). Where, GEP is a powerful evolutionary algorithm for data analysis and combines the advantages of both genetic algorithms (GA) and genetic programming (GP).

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Index Terms

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Keywords

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