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Abstract

Steganography is the science of hiding the messages in a medium. The existence of hidden messages remains imperceptible to the Intruders. The medium used for hiding the messages may be audio, video, text or images. The important goal of steganography is to protect the hidden message. There are many techniques to hide the payload in images. This will be achieved by applying different techniques in any medium. There are many techniques applied by the intruders to find the hidden information those techniques are called anti-steganalysis techniques. To provide the security to the payload after inserting the payload in to messages we need to do the anti steganalysis, if the hidden information is found then we need to provide the additional security. There is a need to build the system with highest security levels so that the anti steganalysis techniques can't find out the hidden information. In the proposed system there are certain areas which are suitable for hiding the payload are called Edges. Edges are good Regions of Interest or ROIs that are used for steganography. The proposed system uses edge adaptive image steganography [1] that uses the combinations of chaotic cat mapping [2] to provide additional security and matrix encoding [3] and LSBM [4] to embed the data in to image. The proposed mechanism guaranties the high imperceptibility and Fidelity which are the two important requirements for any Image steganography.

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Index Terms

Computer Science

Security

Keywords

Payload Chaotic cat mapping Matrix Encoding LSB Matching Regions of
Interests (ROI)
Edge Detection

Image Steganography;