Abstract

Steganography is a process that involves hiding a message in an appropriate carrier for example an image or an audio file. The carrier can then be sent to a receiver without anyone else knowing that it contains a hidden message. The aim of this study was to investigate the various steganography methods & how they are implemented .LSB is a very well known method in this field. In binary images we are very much restricted in the scope as there are only 4 bits or 8 bits to represent a pixel so we are very much restricted to most popular LSB methods .But in colored images there are generally up to 24 bits images with three different RGB channels, if using RGB color space .So, we can explore a lot many new methods which can manipulate or use various channels of colored images in regular or arbitrary pattern to hide the information. Using this concept we have explored the various existing methods of data hiding in colored images & taken an intersection between the arbitrary pixel manipulation & LSB method to propose our work which uses arbitrary channel of a pixel to reflect the presence of data in one or two other channels. Finally we have used the 2k correction method to improve the stego image so as to assure the maximum security against the visual attacks. We have proved that this work shows an attractive result as compared to the other present algorithms on the various
parameters like security, imperceptibility capacity & robustness. At the end the new steganography technique is also compared with the available techniques. It has become a vital resource for everyone.

Reference

Index Terms

Computer Science  Security

Keywords

Steganography  Information reflector