

# Hiding Data in Digital Images using Steganography

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## **Abstract:**

Image processing has the ideas and matter covering the fundamentals of processing the images for different applications such as enhance raw images received from cameras/sensors placed on satellites, space probes and aircrafts or pictures taken in normal day-to-day life for various applications.

Security is the degree of protection against danger, damage, loss, and criminal activity. While, encryption is the process of transforming information (referred to as plaintext) using an algorithm (called cipher) to make it unreadable to anyone except those possessing special knowledge, usually referred to as a key. Where, decryption requires a secret key or password.

Steganography is a field of image processing through which security can be implemented using images. It is a type of hidden communication which performs encryption and decryption on images, having different algorithms for different encryption/decryption techniques.

A Visual Basic based project is implemented which uses LSB algorithm to perform encryption/decryption on images. This tool provides a secure communication of messages by using a secret key (password) through image processing.