

Image Steganography

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Guide: Dr. Rajesh T.M.

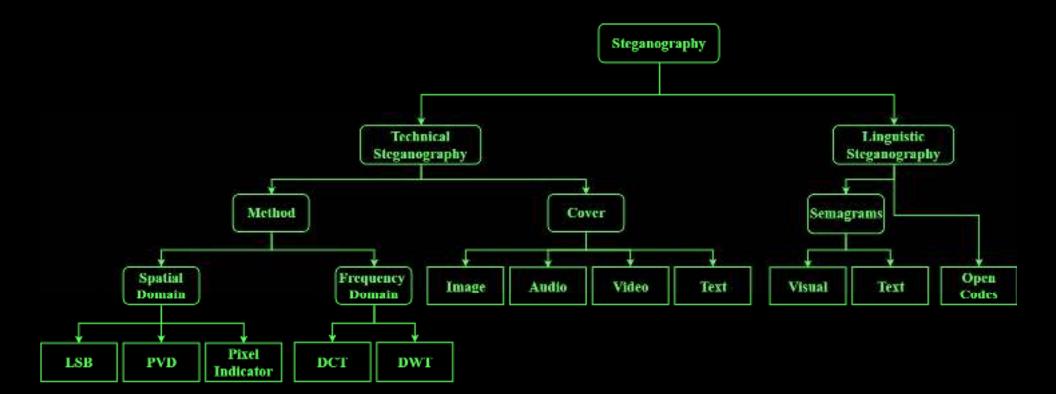


Introduction

What is Steganography?

- practice of concealing a file, message, image, or video within another file, message, image, or video
- replaces unneeded or unused bits in regular computer files with bits of different and invisible information
- steganography protects from pirating copyrighted materials as well as aiding in unauthorized viewing

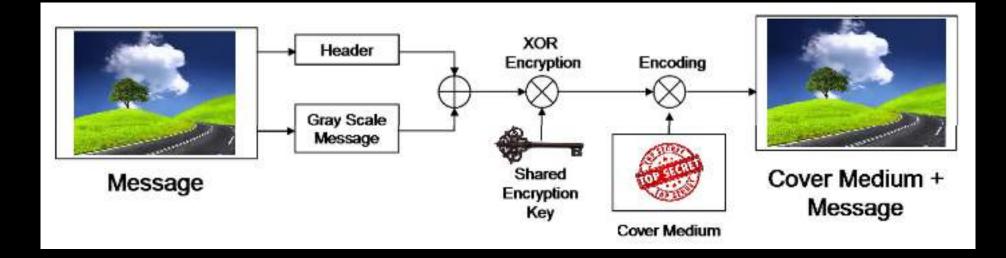
Types of Steganography



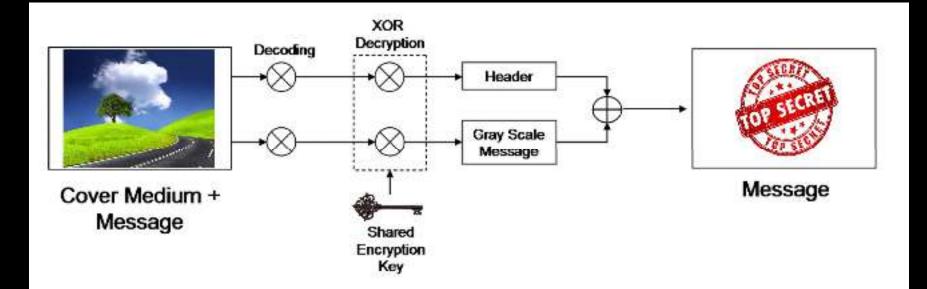
Objective

- Provide safe and encrypted means of transmission
- Study and research on various steganography techniques
- Formulate more efficient algorithm than the native ones

Encoding Process



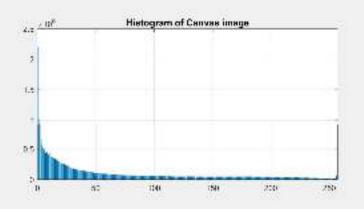
Decoding Process



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Stegenographed Image

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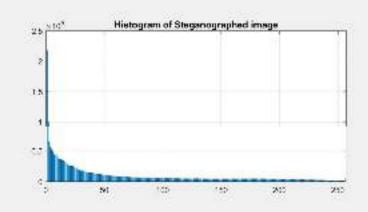
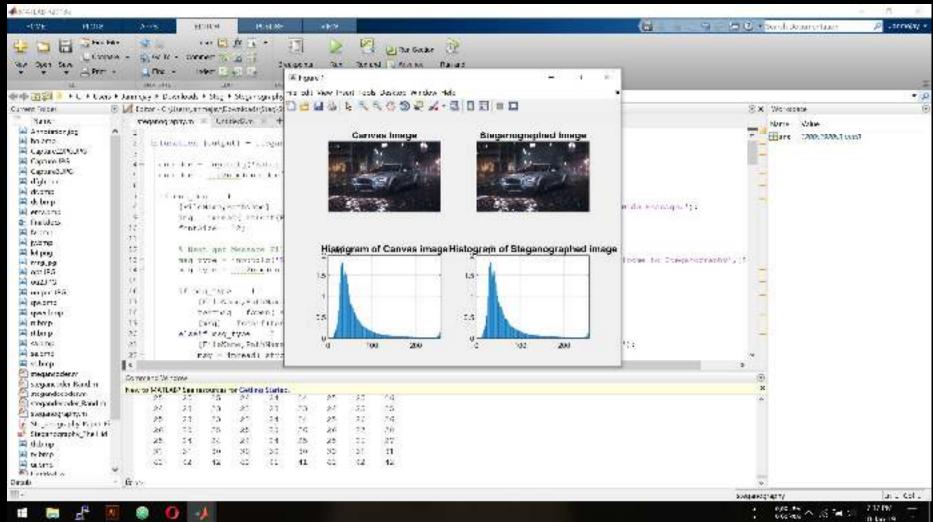




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Shortcomings of the project

- Transforms the image to grayscale
- Not applicable to black & white images
- Gives output in bitmap format
- Canvas Image must be sufficiently larger than secret image

Future Scope

• Dynamic Video Steganography

A video is a collection of still images called frames and audio. Video steganography for hiding secret data using Local Binary Pattern (LBP) in the desired. Segmentation is performed using k-means clustering. As each frame has huge number of pixels and a pixel furthermore has color components, the k-means clustering serves the purpose also concerning the speed.