

MSc Project Report

Steganography Detection System for Compressed RGB Images

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Abstract

Sensitive and confidential data are among the information that belongs to a user or an organization. While everyday activities are greatly facilitated and made more convenient by digital transactions, there are a number of issues with the online interchange of information. Information security would be a top priority. Steganography and cryptography are two such techniques that are essential to secure data transit. By encrypting the data, cryptography changes it, making it impossible to understand and use. However, steganography completely hides the data's existence, thwarting all attacks. Steganography is a great tool for data protection, but it has also been used to compromise security. While keeping data safe from unwanted access is important, obscuring its presence can help keep illegal information hidden. Although there are numerous documented steganography techniques, there are only a few ways to identify steganography. Additionally, there are many difficulties in creating classifiers for detection, including various steganographic techniques, the lack of the original file, and distribution disagreement across many domains.

Keywords: Steganography, Steganalysis, Image Processing