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A Review on Major Image and Video Steganography Techniques

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Abstract: With the growing expansion of the intensive sharing of multimedia content and secret communications, data concealing techniques have become increasingly crucial. Steganography is a mechanism for sharing data covertly and securely. It is the science of embedding hidden information into cover media by altering the cover image in a way that is difficult to detect by human eves. Audio, video and image files can all benefit from steganography techniques. Video steganography is the process of hiding secret information in a video file. Video Steganography is concealing a secret message, which might be a secret text message or an image within a bigger one, in such a way that an unwelcome person cannot determine the presence of the concealed message just by looking at it. There are several Steganography strategies for hiding hidden information in videos, which are further detailed in this paper, along with some of the research efforts done in some disciplines under video steganography by some authors. This article discusses the advancements in the subject of image and video steganography, as well as a comparison of its many applications and methodologies. It is critical to secure digital information while communicating over the internet in today's digitally-driven society. One of the techniques utilised for this is steganography. The importance of steganography and the numerous types of steganography are discussed in this study. It also clarified the vocabulary for the general model of digital steganography. The traditional steganography approach of most minor significant bit substitution is explored. Furthermore, in terms of several performance metrics, a comparison is made between the conventional technique and other techniques for covering media quality and imperceptibility. The size of the hidden message that can be embedded in the image is estimated.

Keywords:MajorTechniquesinImageSteganography,MajorTechniquesinVideoSteganography, Image Steganography,VideoSteganography, etc.

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