

IMPLEMENTING DATA HIDING BY USING AUDIO AND COMPARING DIFFERENT MEDIUMS USED IN STEGNOGRAPGY

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ABSTRACT

Whenever we talk about secret information, then in that case confidentiality plays a vital role in between communicating parties. Cryptography and Steganography are the two main pillars of information security. Cryptography is used just to scramble the information by apply various algorithm e.g Deffie - Hellmen etc, but it is able to reveal secret information: that eavesdropper will come to know that this specific information will contain some confidential data. But Steganography is completely opposite to it. It simply hide the content, In it only sender and receiver will come to know about the confidential information. Now, in this research article We will show that how an audio message will secretly hides confidential data and send it over a medium without a man in the middle will come to know about it: by using Coagula by sender to embed the message in audio and Sonic Visualizer by receiver for decoding purposes. The message which is to be send it can be audio, video, text, image and etc, but here we concerned about image which contain secret information. When image is embed in audio signal then it become stego-signal. In it quality of audio does not suffer because quality is checked twice before and after the extraction of secret message. Quality of stego-image is measured by peak signal to noise ratio(PSNR), Structural Similarity Index Metric(SSIM), Now extracted image is measured by Signal to noise ratio(SNR) and Squared Pearson correlation coefficients(SPCC). Both the quality measures will show good results.

KEYWORDS: Information Security, PSNR, SSIM, SNR, SPCC, Coagula, Sonic Visualizer