

AUDIO ENCRYPTION AND IMAGE WATERMARKING IN VIDEO

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ABSTRACT

The growth of high speed computer networks and that of the Internet, in particular, has increased the ease of Information Communication. Ironically, the cause for the development is also of the apprehension - use of digital formatted data. In comparison with Analog media, Digital media offers several distinct advantages such as high quality, easy editing, high fidelity copying, compression etc. But this type advancement in the field of data communication in other sense has hiked the fear of getting the data snooped at the time of sending it from the sender to the receiver. So, Information Security is becoming an inseparable part of Data Communication. In order to address this Information Security, Steganography plays an important role. Steganography is the art and science of writing hidden messages in such a way that no one apart from the sender and intended recipient even realizes there is a hidden message. In the current internet community, secure data transfer is limited due to its attack made on data communication. So more robust methods are chosen so that they ensure secured data transfer. One of the solutions which came to the rescue is the audio Steganography. But existing audio steganographic systems have poor interface, very low level implementation, difficult to understand and valid only for certain audio formats with restricted message size. Enhanced Audio Steganography (EAS) is one proposed system which is based on audio Steganography and cryptography & watermarking, ensures secure data transfer between the source and destination.

KEYWORDS: Digital Image Watermarking, Singular Value Decomposition, Watermark Embedding Algorithm, Watermark Extracting Algorithm, Ratio Analysis, Security Analysis