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Visual Cryptography for Color Images using Digital-Watermarking

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Abstract: *Visual cryptography is a cryptographic technique which allows visual information (e.g. picture, texts) to be encrypted in such a way that the decryption can be performed by the human visual system, without the aid of computers. There are various measures on which performance of visual cryptography scheme depends, such as pixel expansion, contrast, security, accuracy, share generated is meaningful or meaningless, type of secret images(either binary or color) and number of secret images(either single or multiple) encrypted by the scheme. In visual cryptography encryption of image is done by dividing the image into n number of shares and decryption process is done by combining a certain number of shares or more. simple visual cryptography is not secure because of the decryption process done by visual system. The information or the image can be retrieved by anyone if the person gets at least some number of shares. Secret image can be reconstructed without any complex computation. In this project we use digital watermarking. Digital watermarking is a technique for inserting secret information into an image, which enables us to know the source or owner of thecopyright.*

Keywords: Digital-watermarking, Encryption, Decryption, color-image, KN-secret-sharing algorithm, enveloping

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