Abstract

Visual Cryptography is a special type of encryption technique to obscure image-based secret information which can be decrypted by Human Visual System (HVS). It is a kind of secret-sharing scheme that encrypts the secret image into n number of shares. It is imperceptible to reveal the secret information unless a certain number of shares(k) or more are
superimposed. As the decryption process is done by human visual system, secret information can be retrieved by anyone if the person gets at least k number of shares. For this, simple visual cryptography is very insecure.

In this current work we have proposed a variable length Symmetric Key based Visual Cryptographic Scheme for color images where a secret key is used to encrypt the image and division of the encrypted image is done using Random Number. Unless the secret key, the original image will not be decrypted. Here secret key ensures the security of the scheme and visual cryptography is used to break the image into number of shares.

Reference

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Index Terms

Computer Science Security

Key words

Visual Cryptography Secret Sharing
Random Number
Symmetric Key