A Secure and Verifiable Multi Secret Sharing Scheme for Encrypting Two Secret Images into Two Shares

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Abstract

Data, information and image security is very important in now days. Data and image encryption is a method for preventing misuse of attackers. Because encryption and decryption is important to securely protect data. Visual cryptography is a technique which is beneficial for defense and security. In the old technique; two secret images convert into halftone image and transmit these images using two shares and stacking these two shares revel the secret images. One drawback of this scheme is can't verify the shares are original or fake. In this paper use the verifiable secret sharing using steganography technique to verify the shares. Proposed scheme can verify the share using steganography and then use XOR visual cryptography for share generation, by using this scheme preventing the misuse of adversaries.

References


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**Index Terms**

Computer Science  
Security

**Keywords**

Visual Cryptography, Halftone Technology, Multi Secret Sharing, steganography.