

Visual Secret Sharing for Secure Biometric Authentication using Steganography

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Abstract

Visual secret sharing (VSS) is a kind of encryption, where secret image can be decoded directly by the human visual system without any computation for decryption. Secret image is reconstructed by simply stacking the shares together. Steganography using visual secret sharing (SVSS) is an improved version of visual secret sharing where it embeds the random patterns into meaningful images. One of the applications of SVSS is to avoid the custom inspections, because the shares of SVSS are meaningful images, hence there are fewer chances for the shares to be suspected and detected. The disadvantage of VSS is that the interceptors are able to identify that the secret image has been encrypted. Therefore we propose a method so that it is difficult for the interceptors to know about the presence of the shares. In this Paper, The secret image is encrypted by the corresponding VSS, and then we embed its shares into the covering shares.
