Abstract

Visual Cryptography is an encryption technique that hides information in the images such that it can be decrypted by the human vision if the correct key image is used. This technique divides a secret image into various parts called shares depending on the variation of pixels. Biometrics deals with the automated methods of verifying the identity of a person based on physiological or behavioral characteristics.

This project aims to implement visual cryptography and biometric authentication to build a secure locker system. The fingerprint image of a user is considered as a secret image to generate shares that will be distributed among admin database and user. Authentication will take place by comparing the real time fingerprint image of the user and the image generated from the combination of the shares.
5. Mizuho Nakajima and Yasushi Yamaguchi, “Extended Visual Cryptography for Natural Images”

**Index Terms**

Computer Science  
Security

**Keywords**

Visual Cryptography, Shares, Biometrics, Authentication, Fingerprint, (2, 2) VC