

**PROJECT TOPIC : SELF-VERIFYING VISUAL SECRET**  
**SHARING USING ERROR DIFFUSION AND INTERPOLATION**  
**TECHNIQUES**

**SYNOPSIS**

Security has become an inseparable issue as information technology is ruling the world now. Cryptography is the study of mathematical techniques related aspects of Information Security such as confidentiality, data security, entity authentication and data origin authentication, but it is not the only means of providing information security, rather one of the techniques. Visual cryptography is a new technique which provides information security which uses simple algorithm unlike the complex, computationally intensive algorithms used in other techniques like traditional cryptography. This technique allows Visual information (pictures, text, etc) to be encrypted in such a way that their decryption can be performed by the human visual system, without any complex cryptographic algorithms. This technique represents the secret image by several different shares of binary images. It is hard to perceive any clues about a secret image from individual shares. The secret message is revealed when parts or all of these shares are aligned and stacked together. In this paper we provide an overview of the emerging Visual Cryptography (VC) and related work which is based on the recovering of secret image. A binary logo is used to represent the ownership of the host image and verifies the reliability of the reconstructed image. The logo is used to generate shadows by visual cryptography algorithms. An error correction-coding scheme is also used to create the appropriate shadow. The logo extracted from the half-toned host image identifies the cheating types. Furthermore, the logo recovers the reconstructed image when shadow is being cheated.