Abstract

Visual Cryptography (VC) is a technique used for protecting image based secrets. The main concept of the original visual cryptography scheme is to encrypt a secret image into some shares. Secret information cannot be revealed with few shares. All shares are necessary to combine to reveal the secret image. Halftoning is the important feature of visual cryptography. It provides security at the early stage of visual cryptography. Halftoning is the reprographic techniques, whose process of converting large tone (high intensity value of pixel) image to low tone (low intensity value of pixel) image.

The visual cryptography is a hide information technology. The visual cryptography uses sharing method apply for hide information. Here used the (2, 2) greyscale image method, 2 shares out of 2 stack the secret will reveal and less than 2 shares are not work. Here, proposed a modified algorithm of error-diffusion half toning in visual cryptography. Increment the quality of image by modified method according to different parameters. According to modified method, error distributed to nearest pixel. The compared author method with Floyed, Jarvis, and Stucki throw
PSNR and UQI parameters.

The visual secret scheme decrypts the secret image using Human Visual System (HVS) without any computation. Here, used to (2, 2) generate visual sharing system for halftone gray scale image. Here generate shares of halftone image and recovered secret image.

References


Index Terms

Computer Science  Image Processing
Keywords

Visual Cryptography, Halftone, Error-Diffusion, Shares, PSNR, UQI