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Sharing of Securing A Secret Images Using Media Technique

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ABSTRACT— A natural visual secret sharing technique or Visual cryptography method can share a secret images. It is also enable to send information securily using internet.

This techniques reduces a transmission risk problem in image sharing. It also provides a meaningless shares are user friendly. In this method we can use carrier as diverse media. hence it is possible for sharing secret images. A new proposed technique is extended visual cryptography using embedded processing.

KEYWORDS — Visual secret sharing scheme, extended visual cryptography scheme, Feature extraction Scheme.

I.

INTRODUCTION

Image can contain information to hide a data in smart phones or digital cameras. Sharing & delivering secret images is called as visual cryptography. NVSS can share natural images or digital images and printed images. It can uses carrier as diverse image media. NVSS system can display low quality images in sharing. VSS method can share unity carrier as media and noise like pixels can occurs in resultant images.[4]

As number of share increases probability of failure also increases. NVSS can useful for reducing a transmission problem in sharing. Meaningful images are use friendly. New proposed method can helpful for grey level images. It can provide a secure data transmission in secret sharing.

II. EXISTING SYATEM

VC or NVSS method can share n secret images during transmission. It can helpful for digital images, printed images, color images and transparency images. It consists of main three steps. First step is image preparation is preprocessing of input images. It includes acquiring images, crop images and resizing images. Second step is feature extraction extract features of natural images.[1],[3] It includes binarization, stabilization and clustering. Third step is pixel swapping consist exchanging the pixels of black and white images.

Disadvantages of Existing System:

First, it cannot be used for grey level images. Digital and natural images are only used.Second is large time is required for secret image sharing.

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I. EXISTING SYSTEM WORK



Fig. Algorithm of NVSS or VC Scheme.

Advantages of Proposed System:

First is it helps for grey level images. A half tone images converted into black and white pixels.[6] Second is it provides secure image secret sharing. Third is it provides flexibility and simplicity.

III. SYSTEM ARCHITECTURE

Advanced embedded VC techniques can improve quality of images. This is simple and efficient method. It

consist of Modules:

- Input Image
- Embedding Procedure
- Extraction Procedure.



Fig. system works.

Input Image

An image is a two-dimensional picture, which has a similar appearance to some subject usually a physical object or a person. Image is a two-dimensional, such as a photograph, screen display. They may be captured by optical devices—such as cameras, mirrors, lenses, telescopes, microscopes, etc. and natural objects and phenomena, such as the human eye or water surfaces.[7]

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Embedding Procedure Algorithm :

Input: Cover image of size, secret Image bit stream. Output: Steno image.

- > 1. Find the minimum satisfying, and convert into a list of digits with a -ary notational system.
- ➤ 2. Solve the discrete optimization problem to find and.
- ➢ 3. In the region defined by, record the coordinate such that,
- ➤ 4. Construct a no repeat random embedding sequence.
- 5. To embed a secret Image bit stream, two pixels in the cover image are selected according to the embedding sequence, and calculate the modulus distance between and, then replace with.
- ➢ 6. Repeat Step 5 until all the secret Image bit streams are embedded.

Extraction Procedure Algorithm :

To extract the embedded message digits, pixel pairs are scanned in the same order as in the embedding procedure. The embedded secret Image bit streams are the values of extraction function of the scanned pixel pairs.[5]

Input: Steno image.

Output: secret Image bit stream.

- ➢ 1. Construct the embedding sequence.
- > 2. Select two pixels according to the embedding sequence.
- ➤ 3. Calculate, the result is the embedded digit.
- ➤ 4. Repeat Steps 2 and 3 until all the secret Image bit streams are extracted.
- ▶ 5. Finally, the secret Image bits can be obtained by converting the extracted secret Image bit stream.



Fig. System Architecture.



Fig. Input Sequence Steps.



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Fig. Resultant image.

IV. CONCLUSION:

In this paper we recognize colorful secret images with higher contrast. It can effectively reduce transmission risk problem and user friendly for meaningful images. It can be used in copyright protection, securing, watermarking purpose.

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