Abstract

This paper proposed a highly secure secret shearing scheme for multimedia image communication. The proposed scheme may used for generation of n number shares of a secret image. Both the construction and revealing of shares are based on LSB subtraction. In previously proposed schemes were surfers from several problems. Like in case of images having completely single color other than the color black, the shares were having strip patterns rather than being random or pixel expansion. The proposed scheme is applicable for any size of image, has no pixel expansion and can reconstruct the secret image precisely. The proposed scheme includes no matrix multiplication for construction of shares with computational complexity equal to LSB method. The scheme can be directly applied for any of the binary, grayscale or color image. Experimental results show that the scheme is simple and effective.

References

A Secret Shearing Algorithm based on LSB Substitution

612-613.

Index Terms

Computer Science

Security
Keywords
Secret sharing; steganography; LSB  logistic map