Abstract

Image encryption is conversion of image to a distorted form so that it can be secured from unauthorized users. This paper implements and investigates two methods for image encryption. First technique is encryption of image by linear congruential generator. Random numbers are generated by Linear congruential generator. These numbers are used as index for shuffling of rows, columns and pixels of an image. Second technique uses logistic maps to generate random number sequences. These random numbers are used as index for shuffling of rows, columns and pixels of an image. Finally we have analyzed two methods on basis of image quality parameters.

References

- Bin Wang, Xiaopeng Wei, Qiang Zhang, "Cryptanalysis of an image cryptosystem based on logistic map," Optik xxx (2012) xxx–xxx

Index Terms

Computer Science

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Keywords

Encryption Logistic map Linear congruential generator