Abstract

Now a days, in every communication channel there is a necessity of transmission of messages securely from sender to the authentic receiver. In recent years, for different information transfer systems, a number of data encryption techniques has been evolved. Several encryption approaches based on permutation have been proposed by various researchers. In this paper, for encrypting images, permutation and XOR operation with a key matrix which together fulfill the purpose of cipher is proposed. First the image is divided into blocks which are then shuffled among themselves using random numbers. Lagged Fibonacci Generator (LFG) is used to generate random numbers and further the random numbers are used as key stream for XOR operation. The proposed encryption method is simple and ensures the security of the encrypted images.
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Index Terms

Computer Science  Image Processing
Keywords

Cryptography, image encryption, Lagged Fibonacci Generator (LFG), Random number