Abstract

Visual Encryption is most important in transferring image through the communication networks to protect it against reading, alternation of its content, adding false information or deleting part of its content. The block cipher Rijndael algorithm is used to encrypt and decrypt an image with a variable block length, and a variable key length. This paper focused on the quality measurements such as the speed, Encryption Ratio, Correlation Coefficient, Visual Degradation, and Compression Friendliness of the JPEG image encryption with the existing bitmap image encryption. Since, the JPEG files are of compressed format, the compression friendliness is measured here. The result ends with the comparison of performance parameters, based on the type of file formats.

References

- Giuseppe Mastronardi, Marcello Castellano, Francescomaria Marino,
A New Technique for Image Encryption using RIJNDAEL Block Cipher Algorithms


Index Terms

Computer Science | Security

Keywords

Visual Encryption | Block Cipher Encryption | Jpeg | Encryption Ratio | Compression | Friendliness