Abstract

In recent years, security of several kinds of images is a major issue in secure data communication over any unreliable network. In this paper, a new technique to secure images by using grid-based encryption and decryption approach with RSA cryptosystem has been devised. This approach has taken original image, performed block transformation followed by grid transformation, then finally a public key cryptosystem is applied pixel-by-pixel to secure image. Experimental images have been taken and performed encryption and decryption to elaborate this technique. Error analysis shows that the technique is robust.

References

Index Terms

Computer Science  Security

Keywords

Block Shuffling  Grid Shuffling  Grid-Based Encryption (GBE)  Grid-Based Decryption (GBD).