## **Robust Image Design Based Steganographic System**

Authors : Sadiq J. Abou-Loukh, Hanan M. Habbi

**Abstract :** This paper presents a steganography to hide the transmitted information without excite suspicious and also illustrates the level of secrecy that can be increased by using cryptography techniques. The proposed system has been implemented firstly by encrypted image file one time pad key and secondly encrypted message that hidden to perform encryption followed by image embedding. Then the new image file will be created from the original image by using four triangles operation, the new image is processed by one of two image processing techniques. The proposed two processing techniques are thresholding and differential predictive coding (DPC). Afterwards, encryption or decryption keys are generated by functional key generator. The generator key is used one time only. Encrypted text will be hidden in the places that are not used for image processing and key generation system has high embedding rate (0.1875 character/pixel) for true color image (24 bit depth).

Keywords : encryption, thresholding, differential predictive coding, four triangles operation

**Conference Title :** ICCCCE 2014 : International Conference on Communication, Control and Computer Engineering **Conference Location :** Istanbul, Türkiye

Conference Location : Istanbul, Turkiye

Conference Dates : December 22-23, 2014