**A DWT based Approach for Steganography Using Biometrics**

**Abstract**

Steganography is the art of hiding the existence of data in another transmission medium to achieve secret communication. It does not replace cryptography but rather boosts the security using its obscurity features. Steganography method used in this paper is based on biometrics. And the biometric feature used to implement steganography is skin tone region of images [1]. Here secret data is embedded within skin region of image that will provide an excellent secure location for data hiding. For this skin tone detection is performed using HSV (Hue, Saturation and Value) color space. Additionally secret data embedding is performed using frequency domain approach - DWT (Discrete Wavelet Transform), DWT outperforms than DCT (Discrete Cosine Transform). Secret data is hidden in one of the high frequency sub-band of DWT by tracing skin pixels in that sub-band. Different steps of data hiding are applied by cropping an image interactively. Cropping results into an enhanced security than hiding data without cropping i.e. in whole image, so cropped region works as a key at decoding side. This study shows that by adopting an object oriented steganography mechanism, in the sense that, we track skin tone objects in image, we get a higher security. And also satisfactory PSNR (Peak Signal-to-Noise Ratio) is obtained.