Plan of Work

Study on Color Image Authentication through Chaos based Steganography in Transform Domain

Proposed research work is based on authentication of color images using chaotic sequences in conjunction with steganographic techniques in transform domain.

The main problem domain is divided into three areas, such as 'data hiding', 'authentication', and 'transform domain based secret message transmission'.

Some of the transformation techniques that are to be used during the course of research work are DCT, Haar Wavelet, G-Let transformation in different Domain, Discrete Z-transformation, Discrete Pascal transform, Discrete Gould transform, and some other recent transformation.

During the course of study all of the techniques will be embodied with logistic maps. Optimizations of seeds will also proposed to be done during the course of research.

Relative performances among various transformations used for authentication will also be studied and merits and demerits of each of the technique will be studied extensively with some parametric studies like PSNR, IF, SSIM etc.