ABSTRACT

Video steganography is the art of information hiding mechanism using multimedia. The purpose of the multimedia is getting enlarged day by day. Face recognition systems are also very useful in many applications such as monitoring system, biometrics and security. Principal Component Analysis (PCA) has also been used in some important applications, especially in pattern detection such as face detection and recognition. In real-time applications, the response time must be as small as possible and security must be at a higher level. For this purpose, a new signcryption implementation for securing authentication by face recognition based on the cross-correlation in the frequency domain between the input image and eigen vectors (weights) is proposed. Simulation results demonstrate that the method is faster than the existing ones. The experimental results for different images also show good performance. In this thesis, a new face recognition system using the Principal Component Analysis Signcryption Algorithm (PCASA) within video steganography is proposed. Comparative study has also been made with the existing algorithms.