Abstract

In various applications such as military applications, commercial music systems, etc. audio needs to be transmitted over the network. During transmission, there is risk of attack through wiretapping. Hence there is need of secure transmission of the audio. There are various cryptographic methods to protect such data using encryption key. However, such schemes become single point failure if encryption key get lost or stolen by intruder. That's why many secret sharing schemes came into picture.

There are circumstances where an action is required to be executed by a group of people. Secret sharing is the technique in which secret is distributed among n participants. Each participant has unique secret share. Secret can be recovered only after sufficient number of shares (k out of n) combined together. In this way one can secure secret in reliable way.

In this paper we have proposed Audio Secret Sharing based on Li Bai’s Secret Sharing scheme in Matrix Projection. Then the proposed scheme is critically analysed with the strengths and
weaknesses introduced into the scheme by comparing it with existing schemes.

References


Index Terms
Keywords

Audio Secret Sharing, Matrix Projection, Secret Sharing.