Abstract

Growth of digital technology progressively mount, this easy resulting of user in process duplication and transfer of data like text, image, video and also audio. In digital system, duplication of data can yield new data which almost look like original data, for that needs a[n system protection of copyrights to data. In consequence, consumer wish digital image manipulation by others. If even also happened manipulation to digital image of theirs, consumer have evidence that image of property remain to its.

One of the way of to insert information is by using technique of Watermarking. Watermarking represent a forming of Steganography (Science that learning how to hide a data at other data). Watermarking have applied many in digital media, for example picture, video, audio, and object of multimedia other. Its target is to hide information or say the word copyrights at digital media.

Steganalysis is technique to detect or solve information hidden which is inserted with technique of steganografi. Steganalysis not only good for destroying and attacking method of steganografi,tetapi also can be used to test method delaying of steganografi used. Technique of Steganalysis to be studied here is Stirmark.Pada generally, scheme of watermarking success get away from elementary manipulations (manipulation able to conducted easily use standar technique like rotation, cropping, resampling, resizing, and compression).In general ,scheme of watermark cannot stay from combination or aliance of elementary manipulations. This matter become development base of method of Stirmark.

In this final project will implemented and analyze digital image watermarking exploit least significant bits (LSB) for the concealment of data. This insertion implemented in spatial domain.Insertion with LSB will modified so that can mount its resilience to Steganalysis method of Stirmark.Pada method of LSB Modify watermark will processed in permutation with permutation chaotic before insertion process .Host image will composed in block of n*n depend on comparison of host image size and watermark size,where one block at host image will be inserted one pixel of watermark. Result ofextraction image of watermarked after Stirmark process of LSB Modification mount its resilience able to be seen from value of BER decreasing.

Keywords : watermarking, Steganalysis of Stirmark, bitmap, least significant bits (LSB), spatial domain,chaotic permutation.