

Abstract

Steganography is one of the way to hide a secret message inside another media which is not containing anything, except for those who knows the keys. Steganography can be implemented on many medias, such as digital images, audios, and videos.

The easiest way to implement steganography is 'Least Significant Bit' (LSB). This method is embedding a secret data directly to the least significant bit of the cover carrier in deterministic way. The LSB Method provide a better image quality, but it also has a weakness in how easy the secret message can be detected.

Another method which is then developed is 'Spread Spectrum'. This method used pseudorandom to scramble the secret meesage before it is added to cover carrier. Pseudorandom is a random method which will be the noise for the cover carrier, so that it called by 'pseudorandom noise'.

In this final project we implement the Spread Spectrum method on digital imagery and analyze it's performance against LSB standard method. This can be doing by comparing the image quality before and after embedding, and the quality of the extracted secret message.

Based on the testing of application with two methods, we summarized that the quality of SS stego-image as well as LSB stego-image, and SS method increased the quality of extraction embedded text.

Keywords: steganography, Least Significant Bit, Spread Spectrum, digital image.