Abstract

A good steganography must be able to contain large information (capacity), hard to detect (imperceptibility), and robust to signal processing (robustness). This Final Project implemented a steganography in BITMAP image file using Patchwork method.

Embedding process with patchwork method uses a statistical calculation. In this final project, before embedding process the image devide into two layer, that is red layer and green layer, with means for devide embedding proses between binary 0 and binary 1. And then preparing to testing the method toward imperceptibility and robustness level using parameters such as PSNR, MOS, and BER. In testing included image compression, zoom in, rotation, brightness, and color balance. If more message have been embeded, then the level of imperceptibility decrease (the PSNR result decrease). But for robustness, if more message have been embeded then the level for robustness decreases (the BER result increase). The implementation of this method used matlab application.

Keywords: Steganography, Patchwork, BITMAP, PSNR, MOS, BER.