

## ABSTRACT

*Information security is becoming an integral part of the communication data. Steganography is a technique to hide a secret message by embedded it into the other media such as image, audio, video or IP headers. The supervision of steganography is complicated so it can be misused by criminals to hide their tracks, it has been speculated that terrorists use it to communicate. So, it is necessary to develop a technique that can solve such problem.*

*IDIH is one of steganalysis method used for image steganography. IDIH is the improvement version of a DIH method which was first introduced by T. Zhang et al. First, the image files identified the existence of secret message using DIH, which compares the LSB plane histogram of digital images before and after filled by zero to get the value of message's estimation length. Then a new scheme of IDIH method added to find the modified ratio of message embedding to find modified secret message's estimation length which is more accurate.*

*In this final task, performance of the system is the result which is showed by the accuracy to distinguish digital images based on existance of secret message. Accuracy of IDIH for grayscale and RGB images are 87.4% and 75.3%, whereas accuracy of DIH for grayscale images and RGB images are 75.3% and 70.9% respectively.*

**Keywords :** *Steganography, Steganalysis, Histogram Analysis, Steganalysis IDIH*