## **Abstract**

The development of digital technology is resulting in totally easier way to reproduct, store and distribute digital data. But, in the other hand, it triggers some criminal actions, such as illegal data acquisition and the misuse of the data.

Steganography protects digital data by hiding it in the medium that acts as a cover, while cryptography encodes the data, so it can't be understood by the third party. Both techniques can be combined to produce a better security for digital data protection. This final assignment is combining the security of AES encryption and the security of wavelet steganography.

From the implementation, we can see that this system produce a stego-image with a better security, if the data embedded on the red or the blue layer. The existence of bit errors during extraction contributes to decryption error, in quantity that corresponds directly to the size of the AES block cipher.

Keywords: AES, Block Cipher, Criptography, Steganography, Wavelet.