

## **ABSTRACT**

Steganography, a word derived from Greek meaning “covered writing” ,is the hiding of a secret message inside another message so that no one can detect or decode the secret message. One of media that could be used is audio media. Audio media, not like image media, is rarely used because its inability to hide a relative big amount of data and lack of software which able to do this kind of steganography.

LSB (Least Significant Bit) methods, which is usually used on image steganography, can also be applied on audio steganography. In this final project, we implement Novel method and analyze its performance against LSB standard method. The basic idea of the Novel algorithm is the embedding process that causes minimal embedding distortion of the host audio. Using the two-step algorithm, message bits are embedded into higher LSB layers, resulting in increased robustness against noise addition. Objective measurement of standard LSB method and Novel by computing their SNR and MSE values have showed Novel method outperform the standard LSB method. Listening tests also showed that the perceptual quality of stego-audio is higher in the case of Novel method than in the standard LSB method.

**Keywords : audio steganography, spatial-domain LSB.**