

## ABSTRACT

The coordinates of a location are often used as one of the parameters in some interests, especially in war and security of a region [2]. Cryptographic technology is actually good enough in securing a data, but the number of Attack of each method becomes a constraint in data security, especially location data[4]. Steganography is one of the new breakthroughs and provides a new trend in data security. Steganography is a method of data security by inserting secret data into a media, such as audio files, pictures, and video[10]. One of the most common methods is Image Steganography. However, almost all existing algorithms already have an attack that one of the causes is noise created from the process of making stego-image [6]. In 2015 R.Rejani, D.Murugan, and Deepu V Krishnan in the ICTACT Journal on Image and Video Processing proposed the Pixel Pattern steganography method [5]. Pixel pattern is one of steganography algorithm that try to overcome noise problem from previous steganography technique. However, the disadvantage of this method is if no character value is found from the same message with all values in each image pixel. If a case is found this method will change one of the pixel values in the image to obtain a suitable new character value [5]. This will create a new noise in the image, so the original image will not be the same as the stego-imaganya. For that offered the idea to create a system that is able to improve the ability of the algorithm so that no noise will occur. The modifications made are the use of pattern location so that the image will remain the same as the original image.

**Keyword :** *Steganography, Image, Noise, Pixel, Pattern, Coordinate.*