ABSTRACT

QR Code is already a familiar thing, that is a barcode that needs space in a digital or printed media. One example is a digital poster in a cinema or digital signage that has no place to fill in information such as a synopsis hence the use of QR Code. Steganography method is proposed to replace the QR Code, such that we can include invisible information. Moreover, the Steganography method is expected to embed information in digital posters without taking up more space.

A synopsis insertion system with a steganography method is proposed through this final project, in which the system can encode steganographic information hidden on a digital poster. The poster then will be displayed on screen, captured using a camera, and processed using the Raspberry Pi. The Raspberry Pi, on the receiver side, decodes the hidden information with in-line alignment on the experiments for a sufficiently long distance. The evaluation PC is connected through a remote connection to view the decoded text output.

In this study, it was found that the steganography method was able to insert hidden information into digital posters. The experiments showed that translating secret messages on digital posters has a success rate of 95% with an in-line alignment between the device and the screen displaying the digital poster.

Keywords: *QR Code, Steganography, Digital Signage, Encode, Decode, Raspberry Pi, Alignment, Industry 4.0.*