

ABSTRACT

Now the world has headed for a very significant change, namely the industrial revolution 4.0, where every tool runs a system automatically and is connected to the internet. For example, the QR Code which is now commonplace is used, but in digital posters the form of QR Code blocks the images on digital posters, for example in digital posters in cinemas that do not have a place to fill in information such as a synopsis, therefore with using the steganography method we can include information such as a QR code but hidden or invisible. Moreover, this method is expected to help insert information in a digital poster without blocking the picture from the poster.

In this final project, a steganography method is designed to insert a synopsis. This system is designed to detect hidden information in digital poster images. This system can encode information that you want to hide on a digital poster, then using the Raspberry Pi, the system can decode the hidden information using the Raspicam V1.3 rev camera to capture a poster image with an alignment state that is not in line, then outputs the decoded text.

In this study, it was found that the steganography method was able to insert hidden information into a digital poster and the experiment to capture images on a vertical slant was successful. This system gets a detection success rate of 86% making this system able to translate on a vertical tilt, even though an error occurs and when the tilt is 70° the system is not detected because it is caused by a tilted state so that the image is not visible and the color changes making the camera cannot capture the image as it should.

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