Information Hiding Through Images

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In the age of technology, copyright information is a vital component to organizations or individuals that utilizes the Internet as means of productivity and communication. Unfortunately, this type of information is public and any individual can alter or falsify the information to commit negative actions. This study focuses on developing several techniques to hide messages within gray scale images. Two methods have been developed: hiding every bit of the ASCII representation of each character of the message in a pixel preceding the Most Significant Bit (MSB) of such, and hiding every bit of the ASCII representation of each character of the message in the Least Significant Bit (LSB) of the pixel. The study also focuses on embedding the message in the image as well as successfully retrieving the message. Both of these techniques are in current development and will be analyzed utilizing an image quality tool, Peak Signal-to-Noise Ratio (PSNR) to measure the quality of the altered image in comparison to the original image.

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