Title: Image Compression Application using Lossless Compression Algorithm and Modified Diversity Algorithm (LOCMOD)

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ABSTRACT

People today are fun of taking pictures from their digital camera or from their cellular phones built in camera. The photos taken are then stored in its storage devices or other consider it uploading it to the internet. Problems arise when it comes to limited storage capacity dues to large file issue and uploading in the internet takes time. This is the reason behind why this study is being made. A few image compression algorithms have been presented, each have different ways and some have just derived others work to create and produce new image compression algorithm. One of the image compression algorithms that are common today is the lossless image compression algorithm and modified diversity algorithm. Lossless image compression algorithm is a very much preferred in applications where the images are focused for processing, classification, forecasting, recognizing frequent compression or decompression. In the other hand, Modified Diversity Algorithm, despite the fact that color images can represent such high number of colors, color reduction of images are necessary for several reasons. One reason is that the human eye cannot differentiate such wide range of colors and another reason is being that true color image is often too large to serve its purpose particularly in web and other application. These two-image compression algorithms is the underlying algorithm making this study possible. The study is all about hybrid image compression algorithm. Combining the said two image compression algorithm and making a new algorithm somehow providing people a new tool to make its life easy.

Keywords: Lossless image compression, predictive coding, Huffman-coding, run length encoding