

# **COMPARISON OF THE DIFFERENT IMAGE COMPRESSION ALGORITHMS**

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## **Problem:**

Images are very important documents nowadays, to work with them in some applications they need to be compressed, more or less depending on the purpose of the application. There are some algorithms that perform this compression in different ways; some are lossless and keep the same information as the original image, some others loss information when compressing the image. Some of these compression methods are designed for specific kinds of images, so they will not be so good for other kinds of images. Some algorithms even let you change parameters they use to adjust the compression better to the image.

## **Proposal:**

I want to study some of the different compression algorithms that there are for images. I will study the purpose they were created for and make a comparison of all of them with different images.

I will compress these images and then decompress them to study what was the effect of the compression. I will also play with the different parameters that some of these algorithms allow the user to modify when compressing an image, in order to obtain the best possible result.

I will use a variety of images, some provided in the web page of the class, some others obtained from different sources such as scanners or drawings.

Some of the standards I am interested in comparing are the following:

- lossless: PNG, GIF, TIFF
- lossy: JPEG, JPEG2000

## **References:**

- The JPEG web page: <http://www.jpeg.org/>
- Wikipedia: <http://es.wikipedia.org>