

# Quality Measurement for Pyramid Based Compression Algorithms

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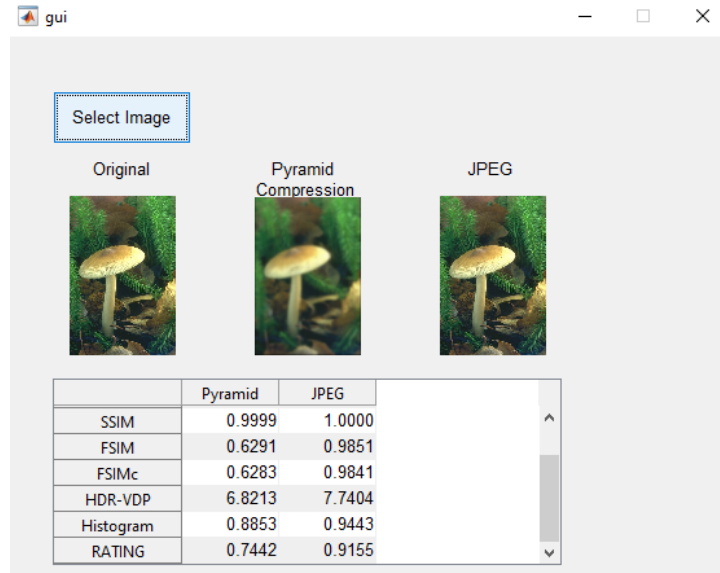


Figure 1: GUI after importing an image

## Project

The aim is to compare how a basic gaussian image pyramid compression performs against jpeg compression on different images, and declare the better compression algorithm by comparing the results of various image similarity algorithms. The higher

## Pipeline

1. The input image is being imported through a GUI.
2. It will be processed by a gaussian pyramid compression on one hand, and jpeg on the other.
3. These two are then compared through image similarity algorithms, as MSE, PSNR, FSIM, FSIMc, HDR-VDP, and a histogram comparison algorithm.
4. The evaluated results will then be normalized if possible, or carefully ranked between 0 and 1 otherwise (1 being an identical image), and their mean calculated.
5. The output is a GUI showing the input image, the results of both image compressions, and a list with the results of the different image similarity algorithms, following the overall rating.

## Results

Resulting GUI shown in image 1.

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