

ABSTRACT

Digital image data has a large information. Storing the digital image need a large space of memory, and to transfer it requires big resources to reach fast bit-rate in order to minimize the delay. Digital image capacity can be reduced to minimize the storage and the delay in transmission process by using a compression technique.

Fractal image compression is a relatively recent image compression method. Fractal image compression gives some desirable properties like high compression ratio, resolution independence, and fast decoding. Encoding time could be so fast or sometimes take a very high encoding time, it is depending on the approach being used.

This final project is analyzing the influence of variation measure of domain grid dimension and range grid dimension toward encoding time, image quality and compression ratio. The testing on some standard images resulted experimental data statistics to determine the best performance.

Keywords : *Fractal, fractal image compression, Iterated Function System (IFS), domain block, range block.*