ABSTRACT

Image compression need to be done considering that image require more space in storage media. In by way of image compression can be produced image which has size smaller than original image. Fractal method is one of the methods that can be applied in the image compression. Fractal image compression has advantage among other high compression ratio with good decompression quality and brief time decompression. But having weakness, which is long time compression.

On this final project, existing fractal method will be developed to shorten time compression that is omit domain block whose has high entropy value from domain pool. So that domain pool which used to represent original image becoming more effectively. Within this application, the method will be realized by way of several procedures among other image resolving into set of range-domain block, seeking of affine transformation, and symbol encoding. To breaking image into set of range-domain block is used horizontal-vertical partition. Then, will be searched affine transformation of domain block, which entropy have determined previously. Later, after finding all of affine transformations will be done encoding with arithmetic coding algorithm.

Expectation result of this final project that is obtained good system performance, evaluated from brief compression time, high compression ratio and good decompression quality.