

## Abstract

The two types of image compression techniques are lossy and lossless compression. The lossy technique usually yields much higher compression ratio by sacrificing some information on the image data. The result, the image can not be recovered. On the other hand, in lossless image compression, the image can be recovered (or reconstructed) without any degradation of the image. There is no loss of information at all.

Lossless compression scheme usually consist of decorrelation process and entropy encoding. There have been a lot of methods used on these two processes. This final assignment analyzed image compression system performance using Linear Prediction on the decorrelation process and Rice Coding as the entropy encoder. This final assignment also observes the compression parameters effect on compression performance.

The result obtained on test of several standard image shows that the parameters have significant effect on compression performance.

**Keywords:** *image compression, lossless, linear prediction, rice coding, compression performance, compression parameters*