

*PERFORMANCE COMPARISON OF FREQUENCY SHIFTER,
BURROWS-WHEELER TRANSFORM AND MOVE-TO-FRONT
PRECOMPRESSION ON LOCATION BASED ENCODING(LBE)
COMPRESSION*

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ABSTRACT

Technology improvements in information media is now commonly used. One of the information medias commonly used is text data. But there is a problem often encountered in it, and that is the need for large space to save data. To reduce the size of text data, a text compression is needed. Coders are used as precompression to improve the compression results.

In this Final Project, a software is designed to compare the performances of three precompression algorithms, which are Frequency Shifter, Burrows-Wheeler Transform and Move-to-Front on one compression algorithm, which is Location Based Encoding compression. The software was made using the programming language of Microsoft Visual Basic 6.0. The data that will be compressed is in the form of a file text (.txt).

Ten tests have been done to compare the performances of the three precompressions on LBE compression, Freq shift precompression results in increased compression ratio by 43,11%. BWT precompression results in increased compression ratio by 12,68%. MTF precompression results in increased compression ratio by 51,5%.

Keyword : compression, decompression, Location Based Encoding, Frequency Shifter, Move-to-Front, Burrows-Wheeler Transform, precompression

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