

IMAGE COMPRESSION USING TWO DIMENSIONAL DUAL TREE COMPLEX WAVELET TRANSFORM

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ABSTRACT

Digital image compression is important due to the high storage and transmission requirements. Various compression techniques have been proposed in recent years to achieve good compression. By removing the redundant data, the image can be represented in a smaller number of bits and hence can be compressed. There are many different methods of image compression. This paper investigates a proposed form of compression based on two dimensional Tree Complex Wavelet Transform The wavelet analysis does not actually compress a signal. Therefore Huffman coding is used with a signal processed by the wavelet analysis in order to compress data. Wide range of threshold values is used in the proposed form. From the results the proposed form gives higher rate of compression and lower RMS error.

KEYWORDS : Digital image compression, Wavelet transforms, Wavelet analysis, data compression