

A NEW APPROACH OF SPEECH COMPRESSION BY USING DWT & DCT

RATISH KUMAR¹ & HEMANT AMHIA²

¹Department of Electrical Engineering, Jabalpur Engineering College, Jabalpur, Madhya Pradesh, India

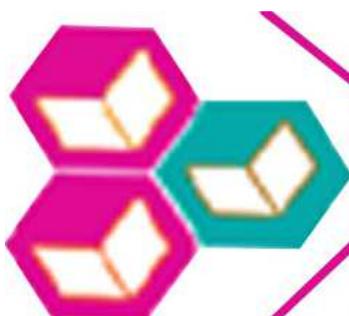
²Professor, Jabalpur Engineering College, Jabalpur, Madhya Pradesh, India

ABSTRACT

With the growth of multimedia technology over past decades, the demand for digital information increase dramatically. The enormous demand poses difficulties in handling speech compression. Speech compression is a mature technology with many applications. To overcome this problem is to compress the information by removing redundancies present in it. Lossy compression scheme that is often used to compress information such as speech signals. This paper presents a method of transformation for the compression of speech signal.

In this paper a new lossy algorithm to compress speech signal using discrete wavelet transform (DWT) and then again compressed by discrete cosine transform (DCT) then decompressed it by discrete cosine transform afterward decompressed by discrete wavelet transform to retrieve the original signal in compressed form. To measure the performance of speech signal on the basis of signal to noise ratio (SNR) and mean square error (MSE) by using different filter of wavelet families.

KEYWORDS: DWT, DCT, Speech Compression & Decompression, PSNR, MSE



Best Journals
Knowledge to Wisdom

Submit your manuscript at editor.bestjournals@gmail.com

Online Submission at http://www.bestjournals.in/submit_paper.php