Abstract

An important aid in analysis & display of speech is sound spectrogram. It represents time-frequency-intensity display of short time spectrum. The quality of speech can be studied by visual inspection of spectrogram. This is one of the important applications of spectrogram in speech processing especially in speech enhancement. Another application of spectrogram is in
isolating voiced and unvoiced regions. But to conclude from visual inspection the clarity of spectrogram is also important. Before plotting the spectrogram the time domain speech signal is converted to frequency domain. The transform domain used plays vital role in resolution of spectrogram. Generally Fast Fourier Transform is used to convert the time domain signal into frequency domain signal. This paper discusses the effect of using different transform for converting the time domain speech signal into frequency domain before plotting spectrogram. It is observed that resolution of speech spectrogram is transform dependent.

Reference

- Nicholas W.D. Evans, John S.Mason and Matt J.Roach ,“Noise Compensation using Spectrogram Morphological Filtering", Speech and Image Research Group, Department of Electrical and Electronic Engineering University of Wales Swansea, UK.

Index Terms

Computer Science  
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