
Abstract: This paper investigates the utilization of wavelet filters via multistage convolution by Reverse Biorthogonal Wavelets (RBW) in high and low pass band frequency parts of speech signal. Speech signal is decomposed into two pass bands of frequency; high and low, and then the noise is removed in each band individually in different stages via wavelet filters. This approach provides better outcomes because it does not cut the speech information, which occurs when utilizing conventional thresholding. We tested the proposed method via several noise probability distribution functions. Subjective evaluation is engaged in conjunction with objective evaluation to accomplish optimal investigation method. The method is simple but has surprise high quality results. The method shows superiority over Donoho and Johnstone thresholding method and Birge-Massart thresholding strategy method.