**ADAPTIVE WIENER FILTERING APPROACH FOR SPEECH ENHANCEMENT**

**ABSTRACT**

This paper proposes the application of the Wiener filter in an adaptive manner in speech enhancement. The proposed adaptive Wiener filter depends on the adaptation of the filter transfer function from sample to sample based on the speech signal statistics(mean and variance). The adaptive Wiener filter is implemented in time domain rather than in frequency domain to accommodate for the varying nature of the speech signal. The proposed method is compared to the traditional Wiener filter and spectral subtraction methods and the results reveal its superiority.

**Keywords**: Speech Enhancement, Spectral Subtraction, Adaptive Wiener Filter