

# **A NOISE REDUCTION METHOD BASED ON MODIFIED LMS ALGORITHM OF REAL TIME SPEECH SIGNALS**

## **ABSTRACT :**

In real time speech de-noising, adaptive filtering technique with variable length filters are used which is used to track the noise characteristics and through those characteristics the filter equations are selected the main features that attracted the use of the LMS algorithm are low computational complexity, proof of convergence in stationary environment. In this paper, modified LMS algorithm is proposed which is used to denoise real time speech signal. The proposed algorithm is made by combining general LMS algorithm with Diffusion least mean-square algorithm which increase the capabilities of adaptive filtering. The performance parameter calculation shows that the proposed algorithm is effective to de-noise speech signal. A full programming routine written in MATLAB software is provided for replications and further research applications.

project supervisor

Dr China Venkateshwarlu

Team members

19951A04H5- Srijan Verma (T.L)  
19951A04J0- Chintha Sudheer  
19951A04D3- Sai Teja