ABSTRACT

Speech, spoken or otherwise allows human beings to make connections with each other. Language helps us shape our understandings of the world around us, it impacts how we interact with the environment. Speech enables us all to develop deeper emotional, cognitive, and mental capacities within our own beingness. It helps us more easily get our needs met and it helps us to be better understood and to better understand others. However, transmission of speech signals in the form of analog or digital form over channels is susceptible to noise. This noise causes degradation of the message signal and thereby loss of information. In order to filter such noise, various types of filter banks are used, such as, Finite Impulse Response (FIR) filters, Infinite Impulse Response (IIR) filters, Quadrature Mirror filters (QMF), etc. Such filters are very effective in noise reduction in very low power and very low signal to noise (SNR) ratio message samples.