Abstract

This paper proposes to extend the band width of narrow band telephone speech signal by employing feed forward back propagation neural network. There are different types of faster training algorithm are available in the literature like Variable Learning Rate, Resilient Back propagation, Polak-Ribiére Conjugate Gradient, Conjugate Gradient with Powell/Beale Restarts, BFGS Quasi-Newton, One-Step Secant, Fletcher-Powell Conjugate Gradient Algorithms, Scaled Conjugate Gradient and Liebenberg-Marquardt. These algorithms are used to train the BPN networks using Neural network tool box. The correlation between the inputs of the neural network and the input-output correlation were calculated. The components were employed to reconstruct the speech signal and the results are analyzed.

Reference
Simulation of Narrow Band Speech Signal using BPN Networks


Index Terms

Computer Science

Signal Processing

Key words

AR Filter

Back propagation neural network

linear mapping method

code book method