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### **Abstract**

In this paper, an attempt is made to study speech recognition system with classifiers Self Organized Maps, Multilayer Perceptron, Radial Basis Function neural networks, Modular neural network, Time Lagged neural network and to develop SOM based speech recognition system. The training parameters varies as the classifier varies. In this paper a novel SOM - based speech recognition system is developed to find the nearest neighbour classification by using Euclidean and weighted Euclidean weighted distances. In order to find out the outlier of the speakers, Nearest neighbour classification by using Euclidean and Weighted Euclidean distances are developed. The promising results are obtained with good degree of accuracy.

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## Index Terms

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## Key words

Mel-frequency cepstral coefficient  
Intensity  
Pitch  
Linear predictive coefficient  
Recognition rate

