Multiple Classifier System (MCS) is designed by combining two or more classifiers. MCS helps in increasing the accuracy of classification compared to the performance of the individual classifier. In this paper, Multiple Classifier System is implemented for automatic speech recognition. The combined classifier takes the final decision on predicted class label using a class label fuser (also called as classifier fuser). The class label fuser uses the predicted class labels of the two classifiers i.e. Hidden Markov Model (HMM) and Support Vector Machines (SVM) and also involves the Dynamic Time Warping (DTW) technique for the final decision on the predicted label. There is an improvement in the accuracy of such classifier compared to the output of any individual classifier.

Index Terms

Computer Science        Signal Processing

Keywords

Multiple Classifier System (MCS)    SVM/HMM    Class label fuser    Kannada Language
Automatic Speech Recognition (ASR)