Abstract

Speech recognition is playing a major role in today's daily life. Dynamic Time Warping (DTW) algorithm has been used in different application for the pattern matching, where the sample and stored reference data size is not equal due to time invariant or due to speed. DTW has been implemented and tested by various ways by different researchers for improving the efficiency of the algorithm. There are challenges of accuracy within reasonable time and cost of memory. Various algorithms are available for efficient computing in the sense of time and space. It has been found that generally accuracy and response time is not linear in nature. So there is tradeoff between accuracy and response time. This paper discuss a method which gives the improvement in response time as compared to exiting method in automatic speech recognition by machine in speaker dependent for isolated spoken word.
Reduction of Computation Time in Pattern Matching for Speech Recognition


Index Terms

Computer Science
Pattern Recognition

Keywords

DTW algorithm High Performance Computing.