Automatic Dialect Classification (ADC) is represented an important new part in automatic speech recognition (ASR). In this paper, an automatic Dialect classification to independent system for Arabic languages is presented. The speaker of this system are from some Arabic countries: Egyptian, Iraq, Levantine and Kuwait, where each speaker speaks clip from the dialect of his country. The Mel Frequency Cepstral Coefficients (MFCC) is adopted here to extract the important features from the speech signal. In the recognition task, the Linear discriminant analyses (LDA) and Dynamic time warping (DTW) are used in classification stage. The LDA and DTW methods are efficient tools for the classification problems with many variations in speech signal. During the testing process, the LDA and DTW was given efficient results in identifying the classes dialect speaker, but the success rate her for DTW is somewhat better compared to LDA.

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Index Terms

Computer Science  Artificial Intelligence

Keywords

Dialect recognition ,Automatic Dialect classification ,Automatic speech recognition ,Dialect and accent recognition, Linear discriminant analyses (LDA).