Abstract

Automatic Dialect classification (ADC) is represented 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 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**

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**Keywords**

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