Hamdan S., Awajan A., Al-Kouz A. 2019. Using Minimum Distance to Classify Uttered Arabic Words into Subject-Object Name. Proceedings of the 6th International Conference on Information Technology, Computer, and Electrical Engineering (ICITACEE), Sep 26-27, 2019, Semarang, Indonesia

Abstract

Due to the improvement in technology, smart devices and smart applications are included in most of human life aspects, and in order to make the interconnection between human and these applications and devices simpler, making these devices and applications understand the spoken language is essential. Speech recognition is the field that is meant to analyze and understand the spoken language. In this paper a new model is proposed to classify the Arabic words into two classes: subject name class or object name class. The Mel Frequency Cepstral Coefficient transformation is used to extract the features from the uttered words, and finally a MAHALANOBIS DISTANCE is used to classify the words using MATLAB tool. The data set that is used contained of 100 Arabic words 50 are subject names and 50 are object names. The results show that the accuracy of detecting subject and object name is 96%.