Abstract

The performances of an automatic system of recognition of word are, generally, directly related to quality, the type and the quantity of the data of training. This article shows the effect like the speaker on the performances of a system of recognition of the words isolated directed towards the problem from pathology from the spoken Arabic, in particular, substitution of the spoken Arabic. The system suggested is based on the models of markov hidden (HMM) whose exit is modeled by a density multigaussiennes (GMM). For the representation of the signals of word coefficients (MFCC) are used.

References

- L. E. Baum, T. Petri, G. Soules and N. Weiss, “A maximization technique occurring in the
statistical analysis of probabilistic functions of Markov chains, ” Annals in Mathematical
- Z.A. Benselama, M. Guerti and M.A. Bencherif, “Arabic Speech Pathology Therapy
- J.A. Bilmes, “A gentle Tutorial of the EM Algorithm and its applications to Parametre
Estimation for Gaussian Mixture and Hidden Markov Models,” Technical report,
Arabia, limited golden papers. 1997.
University, http://htk.eng.cam.ac.uk/
- S. E. Levinson, L. R. Rabiner and M. M Sondhi, “An introduction to the application of the
theory of probabilistic functions of a Markov process to automatic speech recognition,” Bell
- P. Lockwood, C. Baillargeat, J. Gillot, J. Boudy and G. Faucon, “ Noise reduction for
speech enhancement in cars: non linear spectral subtraction,” Proc. Eurospeech 91. Genova,
- A. J. Viterbi, “Error bounds for convolutional codes and an asymptotically optimal
1967.

Index Terms
- Computer Science
- Artificial Intelligence

Keywords
- Component; Automatic Speech Recognition; Language Pathology; Phonemic
Substitution;GM; MFCC; HMM; Arabic spoke.