Abstract

By its morphological, syntactic and phonetic properties, the Arabic language is considered as being one of the languages that are difficult to apprehend in the field of automatic processing of written and spoken language. This paper presents a more effective analysis morphologically (or morphosyntactic) an Arabic word voweled. From this method we can define and determine the
Using Augmented Transition Network for Morphological Processing of Arabic

type of word and its morphosyntactic whatever the word is (simple or composed). The construction of an Arabic word is different from a word in French or in English; it can mean a sentence in French, which explains the difficulty of morphological analysis. Thanks to these characteristics we can do morphological analysis by the use of one of the methods used in the parsing of French or English. This method is based on the automaton and called ATN (Augmented Transition Network).

Reference

- Fouad Soufiane Douzidia, "Résumé automatique de texte arabe", M.Sc Université de Montréal, 2004.
- Stuart C. Shapiro, « generalized augmented transition network grammars for generation from semantic networks», Department of Computer Science, SUNY at Buffalo.
- B. Xiang, K. Nguyen, L. Nguyen, R. Schwartz, and J. Makhoul, “Morphological decomposition for Arabic broadcast news transcription,” in Proc. ICASSP’06, Toulouse, France,
Using Augmented Transition Network for Morphological Processing of Arabic


Index Terms
Computer Science
Natural Language
Processing

Key words
Morphology
Morphosyntactic analysis
ATN
(Augmented Transition Network)

Automate