Abstract

This research paper is an attempt to revise the basic algorithms which have been developed for name matching, such as English Soundx and n-gram. It's an attempt to developed the basic algorithms to process the Arabic names. The main objective of this work is to develop new algorithm to improve the name matching for Arabic names. The developed algorithm could be used also to process other names from other languages. It's an attempt to develop and enhance work places who in charge to collect customer information such as Civil Service Department, Bank Systems, and other organizations. This work will study and analyze the most common used algorithms that used to process personal names. For this purpose this work builds database of specific Arabic names of 6753 along with 93 training queries and 60 test queries. The basic rusticles are based on the comparative analysis of ASoundx and n-gram algorithm respectively. Recall and precision measuring effectiveness have been used to evaluate the proposed algorithm. The obtained results are superior to existing approaches. This work also develop a special software that could be used by entry data worker to help them to process and to select the proper personal Arabic name entry for a particular client.

References

com/arab/language/roman1.htm
- Nicholas Awde, Putros Samano, 1998. THE ARABIC ALPHABET How to Read and Write IT.

**Index Terms**

Computer Science  
Algorithms

**Keywords**

Name matching algorithms  ArabicSoundx  Soundx  n-gram  Information retrieval Systems.