Abstract

Offline handwriting recognition has become lately a very popular research area and the number of its possible application is very large. Most recognition system are based on modeling characters to recognize, then the concatenation of these models to recognize a word, while modeling character allows deformations related to its context. This paper provides a survey of handwritten recognition systems based on context-dependent character modeling to account possible deformations related to its context. It examines the literature on the most significant work in contextual handwritten text recognition for two different alphabets, Latin and Arabic. Finally discussing the comparative results to achieve a comprehensive summary of the various approaches and systems taking account the character's context which could help open up some interesting new prospects.

References

1. Réjean Plamondon, Sargur Srihari “On-line and off-line handwriting recognition: a
comprehensive survey”. in IEEE Transactions on Pattern Analysis and Machine Intelligence 22(1):63-84 · January 2000


17. Mahdi Hamdani, Patrick Doetsch and Hermann Ney “Improvement of Context
Dependent Modeling for Arabic Handwriting Recognition “ 2014 14th International Conference on frontiers in Handwriting Recognition.


19. Irfan Ahùad, Gernot A.Fink and Sabri A.Mahmoud “Improvement in Sub-character HMM Model Based Arabic Text Recognition” 2014 14th International Conference on frontiers in Handwriting Recognition.


Index Terms

Computer Science Pattern Recognition

Keywords

Offline handwriting Recognition, Latin, Arabic, Context, Cursive