Abstract

This paper deals with a recognition system of character for handwritten Tifinagh Text. Here in this work a neural network (the multi-layer perceptron MLP) and Hidden Markov Models (HMM) are proposed for handwritten characters identification. The features of Tifinagh characters are abstracted by mathematical morphology. Acquisition, scanning, thinning and text segmentation are also done in preprocessing phase before the classification with MLP and HMM. This work has achieved approximately 80% of success rate for Tifinagh handwritten text identification.

References


- Hailong Liu and Xiaoping Ding, Handwritten Character recognition Using Gradient feature and Quadratic


- M. -P. Schambach, Recurrent HMMs and Cursive Handwriting Recognition Graphs, Proc. 10th Int’apos:’l Conf. Document Analysis and Recognition, pp. 2 / 3
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Index Terms
Computer Science
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Keywords
Recognition handwritten Tifinagh Text; Segmentation; Neural network; Hidden Markov Models; Viterbi algorithm; Baum-Welch algorithm; Mathematical morphology; Classification.