Abstract

Handwritten Character Recognition is an active area of research in the field of pattern recognition and image processing for last two decades as there is an urgent need of having a successful Script Recognition System to convert handwritten documents into computer understandable form which is applicable for various purposes. Several research studies have been carried out for recognition of other scripts like Chinese, Japanese, English, Devanagari, etc. but the research regarding Urdu Script is still immature due to cursive and variable nature of Urdu characters. The requirement of offline Urdu HCR systems is increasing because of the expansion of technology and the convenience for users. In this paper, a detailed survey of Urdu HCR techniques with respect to feature extraction developed so far alongwith their efficiency and accuracy has been presented. The paper also presents a new proposed B-Spline Curve approximation approach for feature extraction of offline isolated Urdu handwritten characters.

References


28. M. N., K. Faez “Recognition of Multi-font Farsi / Arabic Characters Using a Fuzzy Neural Network” IEEE.


32. Z. Shokoohi, A. M. Hormat, F. Mahmoudi, and H. Badalabadi “Persian handwritten numeral recognition using Complex Neural Network and non-linear feature extraction” First Iranian Conference on Pattern Recognition and Image


Index Terms

Computer Science Pattern Recognition
Keywords

Handwritten, Urdu, Character, Recognition, B-Spline curve, Offline