Abstract

Script recognition systems for various languages have gain importance in recent decades and are the area of deep interest for many researchers. English Character Recognition (CR) has been extensively studied in the last half century and progressed to a level, sufficient to produce technology driven applications. But same is not the case for Indian languages which are complicated in terms of structure and computations. Indian scripts present great challenges to an OCR designer due to the large number of letters in the alphabet, the sophisticated ways in which they combine, and the complicated graphemes they result in. Devanagari(Hindi) being the national language of India, spoken by more than 500 million people, should be given special attention so that document retrieval and analysis of rich ancient and modern Indian literature can be effectively done. This article is intended to serve as a guide and update for the readers, working in the Handwritten Devanagari Script Recognition (HDSR) area. An overview of HDSR systems is presented and the available HDSR techniques are reviewed. The current status of HDSR is discussed and directions for future researches are suggested.
Comparative Study of Segmentation and Recognition Methods for Handwritten Devnagari Script

- Dr. P. S. Deshpande, Mrs. Latesh Malik & Mrs. Sandhya Arora, "Characterizing Hand Written Devanagari Characters using Evolved Regular Expressions", 2006 IEEE
- Dr. P. S. Deshpande, Mrs. Latesh Malik & Mrs. Sandhya Arora, "Handwritten Devanagari Character Recognition Using Connected Segments And Minimum Edit Distance", 2007 IEEE
- Dr. P. S. Deshpande, Latesh Malik & Mrs. Sandhya Arora, "Recognition of Hand Written Devnagari Characters with Percentage Component Regular Expression Matching and Classification Tree", 2007 IEEE
- Sushama Shelke & Shaila Apte, "A Multistage Handwritten Marathi Compound Character Recognition Scheme using Neural Networks and Wavelet Features", 2011
Comparative Study of Segmentation and Recognition Methods for Handwritten Devnagari Script


- Veena Bansal and R. M. K. Sinha "Segmentation Of Touching And Fused Devanagari Characters." 2009
- Cheng-Lin Liu & Hiromichi Fujisawa, "Classification and Learning for Character Recognition: Comparison of Methods and Remaining Problems"

**Index Terms**

Computer Science  
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**Keywords**

Handwritten Devnagari Character Recognition  
Preprocessing  
Segmentation  
Feature Extraction  
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Classification.