Abstract

In country like India, where many languages and scripts exist, Devanagari is third most widely used script, used for several major languages such as Marathi, Hindi, Sanskrit, and Nepali, and is used by more than 500 million people. Character Recognition is a process by which a computer recognizes letters, numbers, or symbols and turns them into a digital form that a computer can use and it is an active field of research today. It comprises of Pattern Recognition and Image Processing. Character Recognition is broadly categorized into Optical Character Recognition (OCR) and Handwritten Character Recognition (HCR). OCR system is most suitable for the applications like multi choice examinations, printed postal address resolution etc, while application of HCR is wider as compared to OCR. Feature extraction and classification are essential steps of character recognition process affecting the overall accuracy of the recognition system. There is not much work has been done towards off-line handwriting recognition of Devanagari script. This paper gives a detailed overview of different feature extraction and classification techniques for recognition process Devanagari script by the researchers over the past few decades.
- Sandhya Arora, "A Two Stage Classification Approach for Handwritten Devanagari Characters", IEEE 399 - 403 vol 2.

**Index Terms**

Computer Science  
Pattern Recognition

**Keywords**

Devanagari Character and Numeral Recognition  
Offline Handwritten Recognition  
Feature Extraction  
Classification