Abstract

Hand written digit recognition is highly nonlinear problem. Recognition of handwritten numerals plays an active role in day to day life now days. Office automation, e-governors and many other areas, reading printed or handwritten documents and convert them to digital media is very crucial and time consuming task. So the system should be designed in such a way that it should be capable of reading handwritten numerals and provide appropriate response as humans do. However, handwritten digits are varying from person to person because each one has their own style of writing, means the same digit or character/word written by different writer will be different even in different languages. This paper presents survey on handwritten digit recognition systems with recent techniques, with three well known classifiers namely MLP, SVM and k-NN used for classification. This paper presents comparative analysis that describes recent methods and helps to find future scope.
A Survey on Feature Extraction Methods for Handwritten Digits Recognition

- S. V Rajashekaradhy, Dr P. Vanaja Ranjan, "Efficient Zone Based Feature Extraction Algorithm for Handwritten Numeral Recognition of Four Popular South Indian Scripts", Journal of Theoretical and Information Technology April, 2008, Pages. 1171-1180.
- Simon, Hykin, "Neural Networks and Learning Machines", PHP 2013.
- Han, Kamber, Pei, "Data mining Concepts & Techniques", Morgan Kaufman MIT press.
- Olarik Surinta, Lambert Schomaker and Macro Wiering, "Handwritten Character Classification Using the HotSpot Feature Extraction Techniques", ICPRAM 2012-International Conference on Pattern Recognition Application and Methods, Pages. 261-264.

Index Terms

Computer Science
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Keywords