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Abstract

The offline character recognition is very useful software in the field of research. Authoritative field of research has made by character recognition due to its need in various fields of research as in banks, post offices to fulfill all recognition requirements. This paper is an exploration on the different scripts including Mathematical digits, Hindi consonants and vowels, Gurumukhi characters as well as numerals. Different handwritten samples of all these language scripts are taken from different persons in a good environment. First of all pre-processing including

different operations for the reduction of noise is operated. The pre-processed documents are then segmented for the feature extraction. In this technique, different features like lines, corners etc. are to be extracted. Number of hidden layers taken are 15. Then neural network is trained for the testing of all these handwritten samples. Out of 100% samples, 90% are used for training, 5% are for testing and the remaining of the samples are used for validation. Comparison of recognition rates achieved on different scripts is accessible. Out of all samples taken, highest accuracy is achieved on the Gurumukhi script which is 99.9%.

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Computer Science

Index Terms

Networks

Keywords

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