Abstract

The aim of this paper is to design a recognizer to recognize Assamese digits using feed forward neural network. The recognizer crops the individual digits of the image using bounding box method and extracts the feature. In the present study zoning is used to obtain necessary feature vector. This feature is provided as input to the classifier and the network is trained with backpropagation training algorithm with two hidden layer. The recognition rate of printed digits is 98%, including multi size, bold and italics fonts. In case of handwritten digits recognition rate is 70.6%.

References

- S. Naz, K. Hayat, M. I. Razzak, et al. "The optical character recognition of
Assamese Digit Recognition with Feed Forward Neural Network

- V. V. Kumar, A. Srikrishna, B. R. Babu and M. R. Mani, "Classification and recognition of handwritten digits by using mathematical morphology," Sadhana vol. 35, pp. 419–426, 2010
- C. M. Bishop, Neural Networks for Pattern Recognition, Claderon Press, Oxford, 1995.
- K. S. Siddharth, M. Jangid, R. Dhir, R. Rani, "Handwritten Gurmukhi Character

Index Terms

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