Abstract

Character recognition is an important problem in Pattern Classification. It is difficult to recognize the character in images or pdf or scanned text or handwritten characters scan. There are various ways to recognize text which comprises of Neural Network, Genetic Algorithm, Soft computing and fuzzy logic. In this paper, we compare the various ways already explored by researchers. We have tried to compare the Artificial Neural Network and Genetic Algorithm for the character recognition. The character image is initially segmented into pixel array and then normalized and skew removed with feature extraction to form an input to the neural network or the genetic algorithm. We work with two set of data, training data and test data and the aim is to recognize character correctly in test data.

References

1. M.Seetha, I.V.Muralikrishna, Member, IEEE B.L. Deekshatulu, Life Fellow Member, IEEE, B.L.Malleswari, Nagaratna, P.Hegde, “Artificial Neural Networks and other methods of image
classification”, GJournal of Theoretical and Applied Information Technology © 2005 - 2008 JATIT.

2. Fakulta matematiky, fyziky a informatiky, “Image Classification using Artificial Neural Networks”, Univerzita Komenského v Bratislave


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Index Terms

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