

A Fuzzy Classifier based on Learning Automata

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Abstract: In this paper, a fuzzy classifier based on learning automata is proposed. In the proposed classifier using a set of learning automata, fuzzy membership functions and the rules for the fuzzy classifier are automatically generated. Each membership function is equipped with a learning automaton which is responsible for determining the best mean and variance for that membership function. In order to show the performance of the proposed classifier it is tested on IRIS dataset. It is shown that the classification can be made with 11 fuzzy rules with accuracy of 93.63% which is a good result in comparison with most of the previous methods

Keywords: Fuzzy Classifier, Membership Function, Learning Automata, Fuzzy Systems