A Learning Automata based Artificial Immune System for Data Classification

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Abstract
In this paper we propose an artificial immune system in which learning automata are used to adaptively determine the values of its parameters. Learning automata are used for altering the shape of receptor portion of antibodies to better complementarily match the confronted antigen. In order to show the effectiveness of the proposed artificial immune computer experiments have been conducted. The results of experimentation demonstrate that the proposed model is a good classifier in both performance and the number of memory cells used for explanation of each class.