Using Minority Game and learning automata in case base reasoning at problems of resource allocation

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The issue of Resource Allocation in Heterogeneous systems has been solved by MaxMin, MinMin and genetic algorithms so they had high Cost. In this paper we try to provide a Combination of Minority Games, LRP Automata and Case Base reasoning, and by using these methods, we reduced costs or Makespan in Resources Allocation Problems. This paper attempts to make changes in the learning of automata for training agents. In the proposed method, we have the MG-ICBR and MG-ICBR-LRP which the first does not use learning automata and the second uses LRP automata. To perform detailed experiments, one type of Case Base is used. Results of experiments show that Cost of allocation in proposed method MG-ICBR-LRP has been decreased and LRP automata acts better.

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