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31 **Abstract**

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33 In this paper, a novel reinforcement learning method inspired by the way humans
34 learn from others is presented. This method is developed based on cellular
35 learning automata featuring a modular design and cooperation techniques. The
36 modular design brings flexibility, reusability and applicability in a wide range
37 of problems to the method. This paper focuses on analyzing sensitivity of the
38 method's parameters and the applicability in optimization problems. Results of
39 the experiments justify that the new method outperforms similar ones because
40 of employing knowledge sharing technique, reasonable exploration logic, and
41 learning rules based on the action trajectory.
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47 *Keywords:* Cellular automata, Cellular learning automata, Knowledge
48 sharing, Optimization
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