

عنوان مقاله:

Selfish Node Detection Based on GA and Learning Automata in IoT

محل انتشار:

مجله بین المللی ارتباطات و فناوری اطلاعات, دوره 15, شماره 1 (سال: 1401)

تعداد صفحات اصل مقاله: 15

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خلاصه مقاله:

It is critical to increasing the network throughput on the internet of things with short-range nodes. Nodes prevent to cooperate with other nodes are known as selfish nodes. The proposed method for discovering the selfish node is based on genetic algorithm and learning automata. It consists of three phases of setup and clustering, the best routing selection based on genetic algorithm, and finally, the learning and update phase. The clustering algorithm implemented in the first phase. In the second phase, the neighbor node selected for forwarding the packet in which has a high value of fitness function. In the third phase, each node monitors its neighbor nodes and uses the learning automata system to identify the selfish nodes. The results of the simulation has shown the detection accuracy of % selfish nodes in comparison with the existing methods average ۱۰ %, and the false positive rate has decreased by ۵

کلمات کلیدی:

Internet of Thing (IoT), selfish node, Genetic Algorithm (GA), Learning Automata (LA), Detection accuracy (DA), false (positive rate) (FPR)

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