

عنوان مقاله:

A New Algorithm for Sensor Placement in Wireless Sensor Networks Using Simulated Annealing

محل انتشار:

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خلاصه مقاله:

The sensor networks contain many sensors and each sensor has a limited and un-replaceable battery. As each node has a number of different duties, a node's wrong performance leads to energy waste and its omission from the network structure. In this paper, thanks to sensors placement due to the increase of network lifetime, an avigorous algorithm is introduced that is able to cover all areas of network with the lowest cost. This suggested algorithm runs based on simulated annealing and it can work on networks in which sensors are organized randomly. Since this algorithm analyses sensors' status regularly it can be taken as a dynamic algorithm. The simulation results indicate that our proposed algorithm can organize the best areas of networks with numerous sensors by the lowest possible cost, and it significantly enhances the network's lifetime. It also guarantees that during execution procedure, all network areas are covered by the selected sensors

کلمات کلیدی:

Wireless Sensor Networks, Sensor, Placement, network's Lifetime, coverage

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