

عنوان مقاله:

An Improved Parallel Genetic Algorithm for Optimal Sensor Placement of Wireless Sensor Networks

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خلاصه مقاله:

The wireless sensor network has recently become an intensive research focus due to its potential applications many years. Sensor placement is one of the most important issues in wireless sensor networks. An efficient placement scheme can enhance the quality of monitoring in wireless sensor networks by increasing the coverage rate of interested area. This paper presents an efficient method based on parallel genetic algorithms to solve a sensor placement optimization problem. We modify the general master-slave parallel genetic algorithm to improve the convergence rate of this optimization method. The results indicate the effectiveness of the proposed method in comparison with genetic algorithm, general parallel genetic algorithm, and some well-known evolutionary algorithms.

کلمات کلیدی:

Sensor placement, Wireless sensor networks, Parallel genetic algorithm

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