Abstract

Wireless sensor networks consist of large number of low cost sensor nodes. All the nodes in the network have a limited transmission range and their processing, storage capabilities and energy resources are limited. These sensor nodes collect the data from the particular area and transmit to the base station for the processing of sensed data. To perform routing in wireless sensor network with this limitation of low power, energy and storage capabilities is a major problem. Due to which the lifetime of the network decreases. To solve this problem of reduced lifetime of the network, an efficient algorithm is required to increase the lifetime of the network. In this paper the Genetic algorithm (GA) is purposed to enhance the lifetime of heterogeneous wireless sensor networks. The work is compared with the ETLE (Efficient Three Level Energy) in terms of the lifetime of the network.

References

Genetic Algorithm for Optimizing the Routing in the Wireless Sensor Network

- Chien-Chih Liao and Chuan-Kang Ting &quot;Extending the Lifetime of Dynamic Wireless Sensor Networks by Genetic Algorithm&quot; WCCI 2012 IEEE World Congress on Computational Intelligence June, 10-15, 2012 - Brisbane, Australia

Index Terms

Computer Science

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Keywords

Wireless sensor networks  heterogeneous networks  Genetic Algorithm