Abstract

Wireless sensor networks can be said as the latest development or improvement in the field of wireless communication. However the advantages of the WSN become limited due to the limited resources, especially low-capacity battery of the sensor nodes. Thus, energy aware routing is an important issue for prolonging the lifetime of the WSN. Among all the basic routing protocols based on the network structure, clustering algorithms have been the much researched upon because of their scalable and energy efficient nature. In this paper, a clustering routing algorithm has been proposed to increase the sensor network lifetime by choosing the cluster heads based on their residual energy and the distance between the cluster members and corresponding cluster heads.

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