Abstract

In wireless sensor network, high packet loss occurs due to the mobile sensor nodes. Energy consumption is also one of the main challenges in mobile sensor nodes. To overcome these problems, a new algorithm is proposed named as Improved Cluster Based Routing Protocol. This routing protocol follows the routing process similar to CBR-Mobile WSN. In addition, it reduces unnecessary broadcast and collision that occurs due to the selection of same sensor nodes within the same transmission range while sending data to CHs. Improved CBR-Mobile WSN reduces packet loss by calculating angle of the nodes that should be less than or equal to 45°. Improved CBR-Mobile WSN is evaluated using MATLAB. In this paper, comparison is shown of Improved CBR-Mobile WSN with CBR-Mobile WSN. It has been observed that the proposed protocol reduces the packet loss with low energy consumption by 5% compared to CBR-Mobile WSN.

References


Index Terms

Computer Science Wireless

Keywords

Improved CBR-mobile WSN CBR-Mobile WSN LEACH-mobile TDMA WSN