Abstract

Data Aggregation techniques are used in wireless sensor networks (WSNs) to collect the data samples from sensor nodes (SNs). Data aggregation techniques for WSNs must address to the issues of WSNs like limited energy, fast and efficient query response, which are essential for network’s performance and maintenance. In this paper, we propose an energy-efficient cluster
Cluster Based Task Scheduling in Wireless Sensor Network

A cluster based task scheduling algorithm (CBTS) to reduce state transitions of cluster heads (CHs). Sensor nodes (SNs) consume different amount of energy in different radio states (transmitting, receiving, listening, sleeping and being idle). CBTS protocol reduces state transitions of radio, thereby reducing the energy consumption. CBTS schedules the CH activity so that when it is in wakeup state, all the reception and transmission activities are continuously performed before it goes into sleep state. Wakeup time is reduced by CBTS Protocol. Simulation results show that CBTS reduces energy consumption and time delay for WSNs.

Reference

Cluster Based Task Scheduling in Wireless Sensor Network


Index Terms

Computer Science
Wireless

Key words

Simulation
Cluster Based Task Scheduling Protocol
TDMA