Data Routing In-Network Aggregation for Wireless Sensor Network

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Abstract

WSNs have limited computational power, limited memory and battery power this increases the complexity and leads to need for data aggregation method. The main goal of data aggregation algorithms is to gather and aggregate data in an energy efficient manner, so that lifetime of network is increased. When WSN sensing an event the redundant data will be detected and collected this need to increase in communication cost and energy consumption of network so, in this work the DRINA (a novel data routing for In-network Aggregation) protocol has some advantages like a reduced number of messages for setting up a routing tree, high aggregation rate, maximized number of overlapping routes. The DRINA algorithm was compared with two other algorithms: (InFRA) The Information Fusion-based Role Assignment and Shortest Path Tree (SPT) algorithms it provides best result.

References


Index Terms

Computer Science

Wireless

Keywords

Wireless sensor networks, DRINA, InFRA, SPT.