Abstract

Human needs are going more technology dependent in last decade. Technology touches live everywhere and also reach the area where humans unable to reach. One of Such important application is Wireless Sensor Networks (WSNs). This helps to collect data from different conditions where human faces challenges to gather information about atmosphere or environment. Apart of its advantage, WSN suffer from many different challenges like limited sensor node electric capacity, pattern of node deployment, data sending mechanism etc. To manage WSN with optimum resource utilization various data transmission methods have been given in recent years. This paper proposed another better method for improving network life span and increase stability of WSN. Proposed method manages all sensor nodes energy power within intelligence manor by using ON-OFF scheduling of node data transmission. Few nodes in ON state sense data and send to base station for one round of data transmission while other nodes are in power saving OFF mode by doing nothing neither sense nor transmit data. But for next round nodes are in ON status nodes goes to OFF power saving modes to save power and OFF mode nodes sense and send data to base station. This method is compared with other
technique using same parameter while simulation and proposed method outperform better in all aspects of WSN comparison.

References


Index Terms

Computer Science

Wireless

Keywords

Energy efficient, Data transmission protocol, ON mode, OFF mode, WSN, scheduling