Abstract

A Wireless Sensor Network is a network of sensor nodes with sensing, conditioning and communication capabilities. All these sensors nodes are deployed in the wireless sensor network in distributed manner. These Sensor nodes rely on their onboard batteries for the energy required for performing their operations. Recharging or Replacement of these batteries is quite difficult. So Several Research efforts are made from many decades to introduce the Wireless Sensor Network (WSN) routing technology with energy efficient manners. In this paper, an experimental evaluation of energy efficiency of routing protocols like dummy, adaptive probabilistic broadcast and adaptive flooding is presented for both 2 dimensional and 3 dimensional scenario of 100 nodes WSN. The computation of energy efficiency of these routing protocols is totally based on the comparative results of parameters like mean energy consumption, average dropped frames and latency of nodes with respect to number of packets transmitted. The computation of these wireless sensor networks are performed using OMNET++ 4.5 with MIXIM module.
References

17. Liyang Yu, Neng Wang, Wei Zhang and Chunlei Zheng, “Deploying a Heterogeneous
Selection of Optimum Routing Protocol for 2D and 3D WSN


Index Terms

Computer Science

Wireless

Keywords

2D & 3D WSN, Energy consumption, latency, routing protocols, OMNET ++.