Abstract

This paper proposes a twin policy model to manage energy for a prolonged network lifetime of a sensor network. Based on the total remaining energy and Probability index calculation to harvest energy in the next round, and an expected energy achieving constant it decides which policy is to be implemented. It is also proposed that a switch between continuous model and partially event triggered model of data reporting. First Policy makes the network to work on continuous model and second policy governs the network for event triggered model. This paper uses a heterogeneous model where a small fraction of nodes have harvesting potential to harvest ambient energy. A multi-hop data forwarding model is used for the communication of data to the sink and to forward command to the nodes.

References

Twin Policy Management Model for Energy Harvesting Wireless Sensor Networks

ICC 2010.


Index Terms

Computer Science Wireless

Keywords
Energy harvesting, Event triggered model, Continuous data reporting model.