Abstract

Constant development and improvement in wireless sensor network (WSN) technology has supplied some new opportunities of small land minor-cost sensor nodes with capacity of sensing various permuted physical and environmental conditions, data processing, and wireless communication. The outcome of diversity of sensing effectiveness is in the excess of application areas. But to an extent, the earliest form of wireless sensor networks require successful desired approach for data forwarding and processing. In WSN, the sensor nodes have a fixed transmission range, and their refining and storage potential as well as their energy systems are also bounded. Routing protocols for wireless sensor networks are the cause for maintaining the routes in the network and also settled some trust worthy multi-hop communication under certain circumstances. In this work the routing protocols are examined for Wireless Sensor Network and compare their attributes. The main important design points for a sensor network are maintenance of the energy available in each sensor node. Increasing the network lifetime has decisive importance in wireless sensor networks. Lots of routing algorithms have been developed in the process. Above all the algorithms, clustering algorithms reached most closely
Study and Analysis of Energy Efficient Cluster based Routing Protocol

in improving the network life time and finally the efficiency of the nodes in it. Clustering provides an efficient way for increasing the lifetime of a wireless sensor Network. This work briefly compares four renowned routing protocols namely, LEACH, SEP, TEEN, and EAMMH for various general scenarios and full fledge analysis of the simulation results against known metrics with energy and network life time being the most important. In this research work the results and observations made from the analyses of results about these protocols are presented.

References

works life time”, International Conference on Innovations in Information Technology (IIT), 2012, pp.194 – 199
16. 

**Index Terms**

Computer Science  
Networks

**Keywords**

Wireless sensor network LEACH, SEP, TEEN and EAMMH energy-efficient, network lifetime.