Abstract

Wireless sensor network (WSNs) comprises of base station and number of nodes. Sometimes remote sensors are used which are generally known as remote sensor actuator systems. WSN is a large network of sensor nodes and these nodes are directly interacting with the environment by sensing the physical and ecological parameters like temperature, weight and so on. The limited energy of the sensor nodes is the major bottle neck of wireless sensor network. By conserving the on board energy, the life span of wireless sensor network can be well extensive. Data communication being the leading energy devastating movement of wireless sensor network, data decrease can provide better in conserving the nodal energy. The basic aim of this paper is to study and evaluate the performance of various techniques that are used for the communication in WSNs. The various algorithms that are used to enhance the energy of sensor nodes in wireless sensor network are portrait
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**Index Terms**

Computer Science  Wireless

**Keywords**

Wireless sensor network, Heterogeneous WSNs, Homogeneous WSNs, Firefly Algorithm, Clustering, Simulated annealing, Energy consumption.