Abstract

A wireless sensor network is capable of sensing physical quantities like pressure, humidity, temperature, real time object and also in the healthcare, and send these reports to the sink (i. e. the central entity), which will process the data and give an output understandable to a human. Wireless sensor network includes hundreds or thousands of sensor nodes. The sensor nodes are having very less energy resources and processing capabilities. Wireless sensor networks are hierarchically clustered, where some of the nodes become cluster heads, and the remaining nodes send their data to cluster head then these cluster head send the data to sink for further processing. We assume here that some of the nodes are having more energy than the normal nodes. So, there is heterogeneity present in the network in terms of sensor initial energy. In this paper we use this additional energy to increase the life time of sensor network. We developed an algorithm to increase the lifetime of sensor network by using the additional energy contained by some of the nodes and also remove the instability caused when the first sensor node dies.
Energy Efficient Clustering using Uniform Deployment for HWSN


Index Terms

Computer Science
Wireless

Keywords
Cluster Maximum Number of Nodes Sensor Network