Abstract

Wireless sensor network (WSNs) presents a new generation that conducts a model of real-time embedded system with limited computation, memory, communication, and energy resources which are being used for vast range of applications where mostly traditional networking infrastructure is practically unobtainable. The energy is the chief agent in designing of WSNs. Sometimes it is impossible and impractical to replace the battery and to maintain longer lifetime of the network when nodes are densely disposed in a competitive environment to monitor, detect and evaluate the physical phenomenon. To attain the energy powerfulness, the clustering is a typical issue. Legitimate CHs are elected to minimize energy consumption and improve the lifetime of the network. Low energy adaptive clustering hierarchy (LEACH) is one
most glorious clustering mechanism. But it depends on stochastic model and energy efficiency is not boosted. In this paper fuzzy logic approach has been used for selection Super cluster Head among CHs is based on three fuzzy descriptors such as battery power, Mobility and centrality which are used to minimize energy consumption and enhance the lifetime of the network than LEACH.

References

A Fuzzy Logic-based Clustering Algorithm: Review

- Padmalaya Nayak, Anurag Devulapalli, 2016 "A Fuzzy Logic-Based Clustering Algorithm for WSN to Extend the Network Lifetime" JOURNAL IEEE SENSORS, VOL. 16, NO. 1, JANUARY.

Index Terms

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Keywords
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