Fuzzy Rules Based Improved BEENISH Protocol for Wireless Sensor Networks

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Abstract : The main design parameter of WSN (wireless sensor network) is the energy consumption. To compensate this parameter, hierarchical clustering is a technique that assists in extending duration of the networks life by efficiently consuming the energy. This paper focuses on dealing with the WSNs and the FIS (fuzzy interface system) which are deployed to enhance the BEENISH protocol. The node energy, mobility, pause time and density are considered for the selection of CH (cluster head). The simulation outcomes exhibited that the projected system outperforms the traditional system with regard to the energy utilization and number of packets transmitted to sink.

Keywords : wireless sensor network, sink, sensor node, routing protocol, fuzzy rule, fuzzy inference system
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