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Ensuring Uniform Energy Consumption in Non-Deterministic Wireless Sensor Network to Protract Networks Lifetime

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Abstract : Wireless sensor networks have enticed much of the spotlight from researchers all around the world, owing to its extensive applicability in agricultural, industrial and military fields. Energy conservation node deployment stratagems play a notable role for active implementation of Wireless Sensor Networks. Clustering is the approach in wireless sensor networks which improves energy efficiency in the network. The clustering algorithm needs to have an optimum size and number of clusters, as clustering, if not implemented properly, cannot effectively increase the life of the network. In this paper, an algorithm has been proposed to address connectivity issues with the aim of ensuring the uniform energy consumption of nodes in every part of the network. The results obtained after simulation showed that the proposed algorithm has an edge over existing algorithms in terms of throughput and networks lifetime.

Keywords : Wireless Sensor network (WSN), Random Deployment, Clustering, Isolated Nodes, Networks Lifetime
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