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Performance Analysis of Hierarchical Agglomerative Clustering in a Wireless Sensor Network Using Quantitative Data

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Abstract : Clustering is a useful mechanism in wireless sensor networks which helps to cope with scalability and data transmission problems. The basic aim of our research work is to provide efficient clustering using Hierarchical agglomerative clustering (HAC). If the distance between the sensing nodes is calculated using their location then it's quantitative HAC. This paper compares the various agglomerative clustering techniques applied in a wireless sensor network using the quantitative data. The simulations are done in MATLAB and the comparisons are made between the different protocols using dendrograms.

Keywords : routing, hierarchical clustering, agglomerative, quantitative, wireless sensor network
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