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Fishing Spider Cluster Configuration: An Energy-Efficient Wireless Sensor Clustering Method

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In this paper, we propose an energy-efficient clustering model for wireless sensor networks. This model performs self-organized clustering using local information and simple rules inspired by the behaviors and capabilities of the six-spotted fishing spider *Dolomedes triton*. We compare our model with a well-known cluster-based routing protocol that uses random fairness for the selection of cluster heads. In our computational experiments, we show that the energy efficiency, lifetime, and scalability of our model exceed those of the comparison protocol.

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