

Abstract

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eqowsn: evolutionary-based query optimization over self-organized wireless sensor networks

in this paper, we introduce a novel evolutionary-based approach that integrates an evolutionary-based mechanism with a decentralized query coverage algorithm for optimal query execution in self-organized wsn where more fitted connected sensor covers will be constructed subject to query imposed on the network while satisfying the coverage constraints. numerous experiments have been conducted to collaborate the efficiency of the proposed techniques. simulations have been carried out with networks of different sizes, densities, query sizes, different values for the transmission radius. a significant improvement is noticed. subsequently, based on the developed simulator, the effectiveness of the algorithms is shown, compared with other approaches results are discussed.