Abstract

Wireless Sensor Networks are composed by sensors distributed in an environment. They are responsible to monitor and transmit its physical characteristics. These networks require robust wireless communication protocols that are energy efficient. In this paper, we present a hierarchical protocol, Hardware-Adaptative Clustering Based Algorithm (HACBA), derived from the Low Energy Adaptive Clustering Hierarchy protocol (LEACH). The protocol was applied to forest fire detection and takes into account some important parameters of the hardware available to the application chosen. This last characteristic is the main difference between the HACBA and the other protocols existing in the literature.

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Keywords

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