Abstract

Visual sensor networks (VSNs) have been attracting more and more research attention nowadays. There are applications where the spatial density of sensors is a constraint. Assuming that with the current technology the cost of a sensor is tens of times greater than the cost of embedded batteries, it will be valuable to examine whether the lifetime of the network could be increased by simply distributing extra energy to some existing nodes without introducing new nodes. In this paper an improvement to LEACH protocol is done to increase the lifetime of network. CPA is heterogeneous-aware, in the sense that election probabilities are weighted by the initial energy of a node relative to that of other nodes in the network. This
prolongs the time interval before the death of the first node (stability period), which is crucial for many applications where the feedback from the sensor network must be reliable.

References


Index Terms

Computer Science
Wireless
Keywords
Leach  Cpa  Vsn