Abstract

Remote Sensor Networks (WSN) alludes to a gathering of moment, low power-driven sensor hubs that are spatially circulated to check the various environmental conditions. These sensor nodes are lightweight in nature, have constrained computational ability and correspondence transfer speed. These sensor hubs are little, savvy detecting and imparting gadgets that are modified for detecting the earth conditions (like fire, mugginess, and so forth), assembling the information and handling it to draw shifted expressive data. Vitality utilization is the significant outline issue which emerges while planning the directing conventions for WSNs. Since WSN conventions are subjected to the sort of use for which they are being set, so the routing conventions intended for the system ought to have the capacity to satisfy every one of the prerequisites of the application. The real issue identified with the outlining of the conventions is to draw out the lifetime of the system i.e. the sensor hubs in the system get by in the system for a more drawn out timeframe without depleting off their full energy. In this paper, a routing scheme based on minimum spanning tree generation along with partitioning the network into grids is proposed.
This methodology depends on the idea of Grid i.e. partitioning the network area into parts in view of isolating the nodes from each other and then in-turn generating Minimum Spanning Tree (MST) structure for communication among sensor nodes. Proposed scheme i.e. one MST at node level inside a grid and other at Grid head level between various grids so as to diminish the heap and increment the system lifetime of WSN.

References


Index Terms

Computer Science Algorithms

Keywords

WSN, Routing, Minimum Spanning Tree, Energy Efficiency