

A NOVEL APPROACH BASED ON MODIFIED RELIABLE MESSAGING PROTOCOL FOR SENSOR NETWORK NAVIGATION WITHOUT LOCATIONS

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ABSTRACT

Network with sensors, now a day made a link which is perfectly a best fitted link in between two worlds which are physical and virtual. These worlds contain computers, networks and information between them. Particularly physical world consist of sensor and sensor networks. Physical world depends upon the information based model which interacts between passive and active networks. In 1990's all the sensors are mainly used as a collector and transmitter only with respect to the usage of the network. Mainly all the systems currently operated on data base structure which is a paid technology to access some system. So to improve and use of technology access without use of data base structure, approach is introduced which works on point to point network communication called as reliable messaging protocol in sensor networks. In addition to this all, this paper gives a new way of interaction between user, sensor and its infrastructure. By studying papers related to sensor networks, we found that there is no need of one or more than the one sinks which only process data back to the original position. It is mainly a network physical communication between user and sensor nodes, but the navigation of mobile sensor is different from the packet routing technique. In this paper various methods are being implemented to compensate the issues which are multipath routing and packet loss etc.

A network using sensors like Telosb mote that helps the people to navigate without use of internet or data on their smart phones. This application is based on the use of map of an area without paying to any network provider. This application is entirely different from the others by the means of network usage and the cost to prior to their locations with specifying the dangerous areas around the roads. This work has put forward the idea of reliable messaging protocol which provides the proper way out from dangerous field with navigation routes. This paper of sensor network navigation without location by Lee, accordingly design a system faces nontrivial challenges which give us effective and efficient protocol. The system supports multiple users simultaneously in a network. Therefore, the system is highly scalable which rebuilt itself in event of dangerous areas on the field. These works compares and conduct simulation of this protocol with others to examine the scalability and efficiency of the network.

With the proper analysis, this work has put forward the idea for wireless sensor network communication but with a better and advanced approach. A system which is highly flexible yet compact with reliability and improved connectivity summed up as a efficient but low cost as its priority has been discussed. In comparision with the previous approaches, this work has come up with improvement of 10 %- 30 % in the factors of super node, sleep mode and bandwidth requirement described in reliable messaging protocol.

The future of this work is the sensors used in the network must be of different type so as to carry out low cost equipments but with high quality range towards piloting of the system.