Abstract

Wireless Sensor Network (WSN) has gained popularity in diverse application fields owing to the inexpensive sensor nodes also called as motes. These sensor nodes are either deployed randomly or placed manually depending on the type of applications. The services of WSN are tremendously being used in application areas such as disaster relief, search and rescue, target tracking, battlefield and many more. Due to the application of WSN in such environments, it is not possible to manually deploy sensor nodes and therefore, the nodes are randomly deployed in the area of interest. Due to the random placement of the sensor nodes, it becomes essential to determine the location of the nodes in order to facilitate communication between nodes as well as Base Station (BS). Further, in case of random node deployment, the usual practice is to deploy a very large number of nodes (more than that of the requirement) in the area of interest. This is done in order to achieve fault tolerance, thus opening a large number of research directions to determine the optimal number of nodes participating in WSN covering problem. This paper deals with an insight on the various localization and coverage techniques used in WSN. Further, this paper tries to establish the interdependence between the localization and covering techniques.
A Survey on Localization and Covering Techniques in Wireless Sensor Networks

- G. M. Crippen, T. F. Havel. 1988. Distance Geometry and Molecular Conformation,
A Survey on Localization and Covering Techniques in Wireless Sensor Networks


**Index Terms**

Computer Science

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**Keywords**

WSN  SERLOC  HIRLOC