The wireless sensor networks (WSNs) come into prominence because they have the capability of changing our economy and life. A very vast range of applications supported by WSNs has served the human society very effectively; and, monitoring has been proven the most attention drawing application among these. As a tributary of sensor networks, Directional sensor networks (DSNs) consist of several camera sensors where nodes cover only a fraction of surrounding defined by a specific angle called vertex angle at a time. As sensors are randomly deployed, their sensing direction may overlap with one another and hence coverage optimization has become the most popular area for research over the years. In this paper, the problem of coverage is surveyed on the basis of the solutions proposed, and hence, classified into three categories as (1) Target coverage (2) Maximal coverage (subset of area coverage) and (3) Maximum coverage with minimum sensors (subset of target coverage). The impact of various parameters of directional sensor networks as: sensor’s location, its working direction, number of orientations, FoVs on the performance of the deployed sensor network is analyzed. Maximum coverage with minimum sensors (subset of target coverage)
References

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The Issues of Coverage in Directional Sensor Network


Index Terms

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