

**NETWORK COVERAGE RESTORATION IN WIRELESS SENSOR
NETWORK**

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ABSTRACT

Wireless sensor networks are emerging as a new computational platform consisting of small, low-power and inexpensive nodes used in a broad set of application areas including environmental monitoring, habitat monitoring and disaster recovery. Typically sensor nodes are deployed over a geographical area for the purpose of detecting, tracking and monitoring events of interest. Since sensor nodes are deployed in a large land region, the objective is to achieve complete coverage of the region. The initial placement of sensors may not achieve this goal for various reasons. It is crucial to develop a sufficient transmission signal between the node in the region or cell to the leader node or in base station. In previous research, network coverage is the main issue in WSN. This project analyzed the coverage restoration problem in sensor networks and proposed a deployment of a hexagonal shaped cell with sectorized antenna. The main objective of this project is to restore and improve the coverage in the network. By improving the coverage problem, it will also reduce the number of sensor nodes deployed. This is due to hexagonal shaped cell consumed high gain capacity.

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