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(57) Abstract :
Wireless Sensor Networks with an Artificial Intelligence Algorithm are used to monitor the air quality in any given location ABSTRACT Every city on the planet faces the problem of deteriorating air quality. Many large cities, especially in developing nations, lack the necessary infrastructure to monitor air quality. Due to the high cost, the government lacks the resources to establish air pollution monitoring stations. In addition, there are currently insufficient monitoring tools to keep track on a large number of distributed stations in the city. It is essential to find a solution to the current issue. This solution must be cost-effective for governments and local communities to deploy, and it must provide an accurate estimation of the quantity of air pollution already present. Creating a network of wireless sensors is one method for achieving this goal. Wireless sensor networks, or WSNs, have several applications in modern enterprises. This has received significant attention from academics. This work proposes a WSN-based system for monitoring indoor air pollution in diverse public areas. Among these public areas are subway stations, workplaces, schools, and hospitals. Utilizing the sensors currently present in mobile phones, the proposed system moves away from a fixed-node architecture and toward a mobile-node model. The primary objective of this system's construction is to ensure that it covers the entire area.

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