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(57) Abstract :
One of the major challenges these days is the increase in air and sound pollution. In this innovation, we demonstrate an air quality and sound pollution monitoring system that uses IOT to monitor activity in specific locations. The system makes use of an air sensor, such as the MQ135, to detect or sense the presence of hazardous chemicals or compounds in the air and continually feeds data to the microcontroller. Also, the system continuously measures the sound level with a sound sensor such as the LM393 and transmits it to Aurdino, where the signals are processed according to the programme and also reported to the internet server through IOT. The system technology is so user-friendly and simple to operate that it can be implemented in homes, schools, and small spaces. In this scenario, innovation such as the Internet of Things (IoT) is employed; sensing devices are linked to the embedded computer system to monitor the variation of parameters such as noise and air pollution levels from their typical values. The functional presentation of the prototype model is evaluated using a prototype implementation consisting of an Arduino UNO board, sensor modules, Think Talk, and MATLAB for continuous monitoring, regulation, and analysis.

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