

IoT based Air Pollution Monitoring System

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Abstract: *The IoT-Based Air Pollution Monitoring System addresses the urgent global issues of air and noise pollution by leveraging the Internet of Things (IoT) to provide a sophisticated real-time monitoring solution. This innovative system enhances data accuracy and accessibility, thereby fostering environmental awareness and supporting informed decision-making and policy development. Despite its evident benefits, such as facilitating urban planning, public health initiatives, and community engagement, the system also faces challenges, including high implementation costs and data security concerns. Nevertheless, its application in environmental research and policy formulation highlights its significant potential to drive positive change in pollution management and environmental consciousness.*

Keywords: IoT, air pollution, real-time monitoring, environmental awareness, data security.