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Patent Search

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Abstract:

Controlling noise pollution especially from vehicles is becoming a technology to measure vehicle noise in real-time. The IoT sensors are strategically placed around cities to measure the decibel levels of passing vehicles. This data is then processed using advanced ML algorithms which can locate areas with particularly high levels of noise, as well as trends in the amount of noise over time and the types of vehicles that cause the most urban noise pollution. With this new understanding city planners may create more effective strategies to reduce noise pollution and facilitate sustainable growth. The effectiveness and scalability of the proposed IoT solution are shown via experiments and validation in a real-world urban context. This is a new technique for sustainable urban planning and environmental management.

Complete Specification

Field of Invention

Environmental monitoring using Internet of Things (IoT) technology, Machine Learning (ML) and urban planning are all dynamically combining in the realm of innovation for a

system that monitors vehicle noise and uses ML for urban planning. The urgent problem of

noise pollution caused by traffic in metropolitan areas is something that our novel method

intends to address. It uses IoT technology to set up a system of sensors distributed throughout

cities, allowing for the continuous monitoring of traffic noise levels in real time. By

facilitating complex analysis of noise data, the integration of ML algorithms enhances the

system's capabilities. This analysis enables the detection of noise hotspots, temporal patterns,

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