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IoT Based Predictive Maintenance System for Industrial Machine

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Abstract: *The IOT Based Predictive Maintenance System is an innovative solution designed to monitor the health and performance of industrial machines in real time. Using Internet of Things (IoT) technology, various sensors are connected to equipment to continuously collect data such as temperature, vibration, pressure, and humidity. This data is then analyzed using Artificial Intelligence (AI) and Machine Learning (ML) algorithms to predict potential failures before they occur. The system alerts operators to maintenance needs, preventing unexpected breakdowns and reducing downtime. Compared to traditional maintenance methods, this approach improves efficiency, increases equipment lifespan, and minimizes maintenance costs. The proposed system ensures a shift from reactive or scheduled maintenance to a data-driven predictive approach, enabling smarter and more reliable industrial operations..*

Keywords*: IOT Based Predictive Maintenance System*

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