

Predictive Maintenance of Industrial Machines Using Internet of Things

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Abstract: *Predictive maintenance (PdM) is revolutionizing industrial machine management by using real-time data collected from IoT-enabled devices to predict machine failures before they occur. By leveraging IoT sensors, AI, and machine learning algorithms, industries can optimize maintenance schedules, reduce unplanned downtime, and improve operational efficiency. This paper explores the role of IoT in predictive maintenance, reviewing the methodologies, technologies, applications, and challenges associated with its implementation in industrial environments.*

Keywords: pdM, Real time data, IoT sensors, Machine learning algorithms