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H. K. Merchant, D. D. Ahire

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Abstract

Internet of Things (IoT) is propagating and blooming technology, in previous years. IoT is the collection of the sensors data through embedded system and this embedded system upload the data on internet. There are many challenges to IoT and Industrial Automation for example Data and service security, Trust, data integrity, information privacy, scalability and interoperability Automation Domain Constrains. This paper combines the concept of Raspberry Pi Industrial workstation and Industrial Automation using IoT. The system uses the raspberry pi as controller and server, the programing is done in the python language. The webpage is designed in HTML, JQuery, ajax and Flask as framework for rendering the HTML template in python. All sensor data are collected through raspberry pi. All the use full data are access remotely through internet of thing platform. Here the blade ageing system of cutter tool is taken to as industrial example and current is monitored to the webpage using raspberry pi as server. This system demonstrates successful measurement of current consumption of cutting tool and indicate to change the blade if it damaged. It also senses the workstation temperature.

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Index Terms

Computer Science Automated Systems

Keywords

IoT, Industrial Internet of Things(IIOT), Wireless Sensor Network, Raspberry Pi.