Abstract

Air quality nowadays has been degraded to a large extent that it has become a necessary criteria for us to monitor its quality. The quality of air has been affected by various factors like industrial emission, vehicular transmission etc. The evolution of various technology like the Internet of Things, Raspberry Pi, it has become easier for us to deploy sensors and allow to detect the quality of air in real time. The Internet Of things is a term for various devices communicating with each other which was not possible before since the different devices use different kind of data which has been overcome by the use of single board computer (Raspberry Pi). Integration of IOT with Sensor nodes with the help of Raspberry Pi for Air Quality Monitoring provides an effective way than the approaches that were previously used. Sensor web node is proposed with commercial gas sensors for detecting the gases like CO, CO2 etc to monitor both indoor and outdoor air quality. The results obtained through these sensors are then evaluated by Ruby on Rails Server through web socket.
7. Internet of Things based Smart Environmental Monitoring using the Raspberry-Pi Computer, 2015 IEEE

Index Terms

Computer Science  Information Systems

Keywords

Raspberry Pi, Arduino Mega, Web Socket, Sensors, IOT