IoT-Based System for Continuously Reporting Meteorological Conditions

A PROJECT REPORT

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In partial fulfillment for the award of the degree

of

BACHELOR OF ENGINEERING

in

MECHANICAL ENGINEERING

CHRIST THE KING ENGINEERING COLLEGE

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MAY 2023

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BONAFIDE CERTIFICATE

Certified that this project report " IOT-BASED SYSTEM FOR CONTINUOUSLY REPORTING METEOROLOGICAL CONDITIONS" is the bonafide work of "ELAIYARAJA M (710419114017), FEMINJITH V S (710419114019), KATHIRVENDAN S (710419114033), ANLIN BENITTO D (710419114301) who carried out the project work under my supervision.

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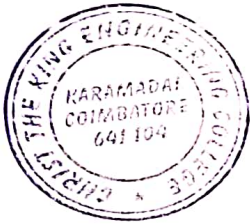
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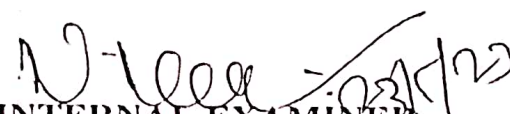
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Submitted for the project viva voice held on 23/05/23

INTERNAL EXAMINER   EXTERNAL EXAMINER

Abstract

This work presents a state-of-the-art system for keeping tabs on the weather at a specific location and making that data available online. This is made possible by the cutting-edge technology of the Internet of Things (IoT), a network that links everything in the world to the web. Electronics, sensors, and other forms of car electronics are all fair game. Sensors are used to keep tabs on things like temperature, humidity, and carbon monoxide levels, and the data is sent to a website where it is shown graphically. Information that has been updated in the system that has been installed is available online and can be accessed from any location.
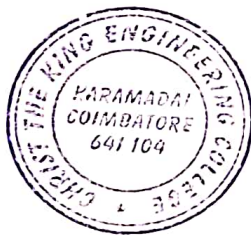
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Conclusion

By keeping the weather station in the environment for monitoring enables self-protection (i.e., smart environment) to the environment. To implement this need to use the sensor devices in the environment for collecting the data and analysis. By using sensor devices in the environment, we can bring the environment into real life. Then the collected data and analysis results will be available to the user through the Wi-Fi. The smart way to monitor the environment an efficient, low-cost embedded system is presented in this paper. It also sent the sensor parameters to the cloud. This data will be helpful for future analysis and it can be easily shared to other users also. This model can be expanded to monitor the developing cities and industrial zones for pollution monitoring. To protect the public health from pollution, this model provides an efficient and low-cost solution for continuous monitoring of environment.

Future Scope

One can implement a few more sensors and connect it to the satellite as a global feature of this system. Adding more sensors to monitor other environmental parameters such as CO_2, Pressure and Oxygen Sensor. In aircraft, navigation and the military there is a great scope of this real-time system. It can also be implemented in hospitals or medical institutes for the research & study in "Effect of Weather on Health and Diseases", hence to provide better precaution alerts.

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