



Browse ▾ My Settings ▾ Help ▾

Access provided by:  
Vels Institute of Science  
Technology & Advanced  
Studies (VISTAS)[Sign Out](#)Access provided by:  
Vels Institute of Science  
Technology & Advanced  
Studies (VISTAS)[Sign Out](#)[All](#)[ADVANCED SEARCH](#)Conferences > 2023 3rd International Confer... [?](#)

# IoT based Weather, Soil, Earthquake, Air pollution Monitoring System

**Publisher:** IEEE[Cite This](#)[PDF](#)Kondireddy Muni Sankar ; B. Booba ; C Rangaswamy ; P. V. Pramila ; Sangita Rani Kar ; Ashok Kumar ; M. Sudhakar [All Authors](#) ...1  
Cites in  
Paper106  
Full  
Text Views

## Alerts

[Manage Content Alerts](#)  
[Add to Citation Alerts](#)

### Abstract

Downl  
PDF

#### Document Sections

I. Introduction

**Abstract:**This article provides IoT information on a great option for tracking local temperature variables and enabling the information accessible from any part of the planet. The ... [View more](#)

II. Suggested System

III. Software Used

IV. Results &amp; Effects

V. Conclusion

**Metadata****Abstract:**

This article provides IoT information on a great option for tracking local temperature variables and enabling the information accessible from any part of the planet. The dynamic changes in the weather are to blame for the severe flooding. Using the NODEMCU ESP8266, it accomplishes the creation of a flood observing arrangement for loading and recovering data from the arrangement. Ultrasonic sensors and LEDs are used to warn the authorities to the presence of heavy water. A crucial component of plant life, soil moisture will directly impact crop growth and output. A key component of the vegetation that directly affects the development and production of the harvest is soil moisture. It uses a microcontroller and sensor to carry out the advancement of soil dampness checking. The initial tremor of a large earthquake is picked up by an earthquake warning system employing a sensor. Because there are more businesses and vehicles on the road today, the air quality is poor, which has an impact on people. The importance of using IOT to evaluate the value of the air and the amount of pollutants in the environment cannot be overstated because the field has experienced a major development. It creates a system that uses the MQ135 sensor, which will be visible on the Cayenne platform, to measure the amount of harmful airborne pollutants such methane, alcohol, benzene, and CO<sub>2</sub>. Data is automatically stored in private channels by thing talk. The data obtained from the embedded scheme could be reachable over an internet from wherever in the sphere.

Authors

Figures

References

Citations

Keywords

Metrics



ng [MathJax]/extensions/MathMenu.js

**Date of Conference:** 22-24 February 2023**DOI:** 10.1109/ICIPTM57143.2023.10118160**Date Added to IEEE Xplore:** 10 May 2023**Publisher:** IEEE**► ISBN Information:****Conference Location:** Uttar Pradesh, India

## Contents

### I. Introduction

The weather system was a technological advancement that uses multiple sensors to collect data.

The NODEMCU ESP8266, the device's brain, communicates with temperature & humidity sensors, barometric pressure sensors (BMP181), & rain sensors (FC38) for monitoring the various climate components, like temperature, rain, and humidity separately [1]–[5].

---

Authors

---

Figures

---

References

---

Citations

---

Keywords

---

Metrics

---

### More Like This

Early Detection and Prediction of Flood and Earthquake using Internet of Things: A Computer based Disaster Control System

2023 International Conference on Communication, Security and Artificial Intelligence (ICCSAI)

Published: 2023

---

Soil Moisture Monitoring Through UAS-Assisted Internet of Things LoRaWAN Wireless Underground Sensors

IEEE Access

Published: 2022

**Show More**

IEEE Personal Account	Purchase Details	Profile Information	Need Help?	Follow
CHANGE USERNAME/PASSWORD	PAYMENT OPTIONS  VIEW PURCHASED DOCUMENTS	COMMUNICATIONS PREFERENCES  PROFESSION AND EDUCATION  TECHNICAL INTERESTS	US & CANADA: +1 800 678 4333  WORLDWIDE: +1 732 981 0060  CONTACT & SUPPORT	<a href="#"></a> <a href="#"></a> <a href="#"></a> <a href="#"></a>

[About IEEE Xplore](#) | [Contact Us](#) | [Help](#) | [Accessibility](#) | [Terms of Use](#) | [Nondiscrimination Policy](#) | [IEEE Ethics Reporting](#) | [Sitemap](#) | [IEEE Privacy Policy](#)

A not-for-profit organization, IEEE is the world's largest technical professional organization dedicated to advancing technology for the benefit of humanity.

© Copyright 2024 IEEE - All rights reserved, including rights for text and data mining and training of artificial intelligence and similar technologies.

## IEEE Account

- » [Change Username/Password](#)
- » [Update Address](#)

## Purchase Details

- » [Payment Options](#)
- » [Order History](#)
- » [View Purchased Documents](#)

## Profile Information

- » [Communications Preferences](#)  
Loading [MathJax]/extensions/MathMenu.js
- » [Profession and Education](#)

» Technical Interests

## Need Help?

» **US & Canada:** +1 800 678 4333

» **Worldwide:** +1 732 981 0060

» Contact & Support

[About IEEE Xplore](#) | [Contact Us](#) | [Help](#) | [Accessibility](#) | [Terms of Use](#) | [Nondiscrimination Policy](#) | [Sitemap](#) | [Privacy & Opting Out of Cookies](#)

A not-for-profit organization, IEEE is the world's largest technical professional organization dedicated to advancing technology for the benefit of humanity.

© Copyright 2024 IEEE - All rights reserved. Use of this web site signifies your agreement to the terms and conditions.

Loading [MathJax]/extensions/MathMenu.js