



Air Quality Monitoring System using IoT

Author: Pi

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01

Abstract





Abstract

Prepare a professional PowerPoint presentation on the topic "Air Quality Monitoring System using IoT".

The system should be described using the following components: ESP8266 Wi-Fi module, DHT11 temperature and humidity sensor, MQ135 air quality sensor, and connecting wires.

The presentation should include the following sections:

- Abstract
- Introduction
- Objective
- Literature Survey
- Existing System
- Proposed System
- Modules
- Future Enhancements
- References

02

Introduction

Introduction



Content should be technical, clear, and tailored for an academic project.



Highlight how the system collects and transmits environmental data and its importance in real-time air quality monitoring.

03

Objective

Objective

To develop an efficient air quality monitoring system using IoT.



To provide real-time data on air quality.

To create awareness regarding air pollution.

The background of the slide features a row of six clear glass test tubes standing upright. Above them, a glass dropper is shown with a single drop of liquid hanging from its tip. The entire scene is set against a dark blue background and is overlaid with a semi-transparent blue filter.

04

Literature Survey

Literature Survey



Review existing literature on air quality monitoring systems.



Analyze various methodologies and technologies used in current systems.



Identify gaps in the existing systems and propose enhancements.

05



Existing System

Existing System

Describe the limitations of current air quality monitoring systems.

1

2

Highlight the lack of real-time monitoring in traditional setups.

3

Discuss the challenges faced in data collection and transmission.



The background of the slide is a dark blue field filled with a pattern of glowing, three-dimensional hexagons. These hexagons are arranged in a honeycomb-like structure, with some appearing more prominent and in focus than others, creating a sense of depth. The hexagons have a bright blue outline and a slightly lighter blue center, giving them a crystalline or technological appearance.

06

Proposed System



Proposed System

- 1 Introduce the proposed air quality monitoring system design.
- 2 Detail the integration of the ESP8266 Wi-Fi module, DHT11, and MQ135 sensors.
- 3 Explain how the system improves data accessibility and response time.

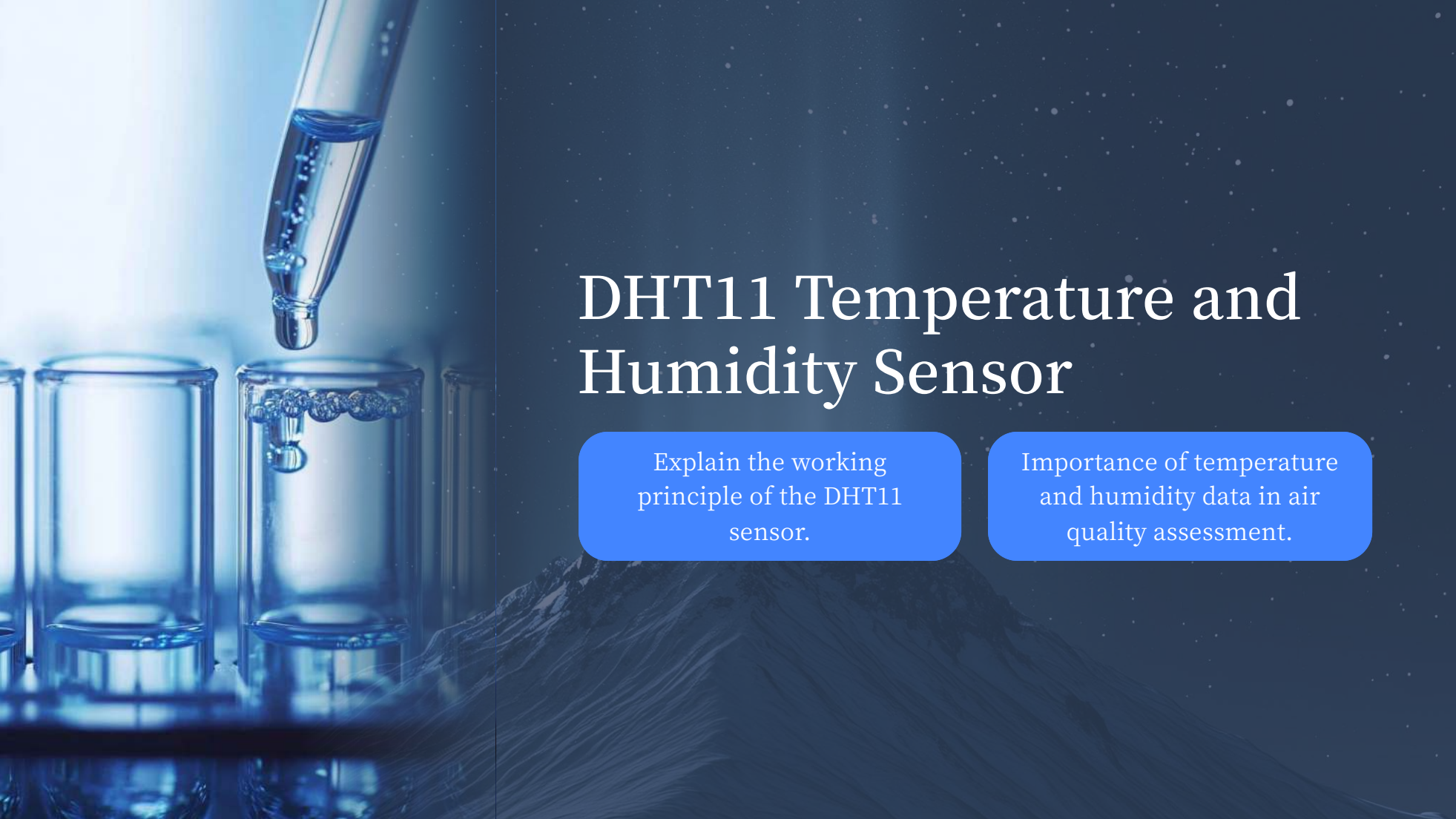
07

Modules

ESP8266 Wi-Fi Module

- 1 Description of the ESP8266 features and functionalities.
- 2 Discuss its role in data transmission.





DHT11 Temperature and Humidity Sensor

Explain the working principle of the DHT11 sensor.

Importance of temperature and humidity data in air quality assessment.

MQ135 Air Quality Sensor



Overview of MQ135 sensor capabilities.



Importance of detecting various gases to measure air quality.

Connecting Wires



Discuss the significance of wiring in the system setup.

Explain different types of wires used and their durability.

A digital illustration of a futuristic cityscape where skyscrapers are rendered as glowing blue and yellow circuit traces on a dark blue background. The buildings vary in height and shape, some with intricate patterns on their facades. The overall aesthetic is high-tech and digital.

08

Future Enhancements

Future Enhancements

Suggest improvements for system efficiency and accuracy.

1

2

Discuss potential for integration with mobile applications.

3

Propose a more extensive network of monitoring stations for broader data collection.

09

References

References

Include a list of academic papers, articles, and other resources used in research for the project.



The image features two dandelion seed heads in the foreground, their white, feathery seeds clearly visible against a solid blue background. The seed heads are positioned slightly to the left and right of the center. In the lower right, a third, out-of-focus seed head is visible. The stems of the dandelions are thin and light-colored. The overall composition is simple and elegant, with the text 'Thank You' centered over the image.

Thank You