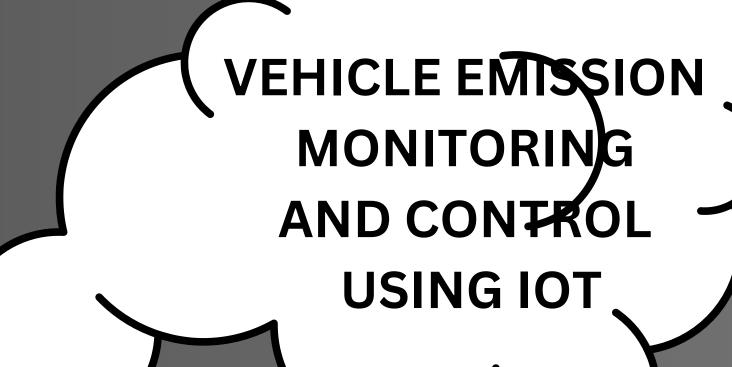


AAVISHKAR







INTRODUCTION

It is critical that we efficiently monitor and control vehicle emissions to reduce these emissions, which are one of the <u>most</u> <u>significant sources</u> of air pollution and can have major consequences on human health and the environment.

The <u>Internet of Things</u> uses the Internet to create real-time connections between components and the Internet, enabling emissions monitoring and control systems to be developed in a more efficient and effective approach than is currently available



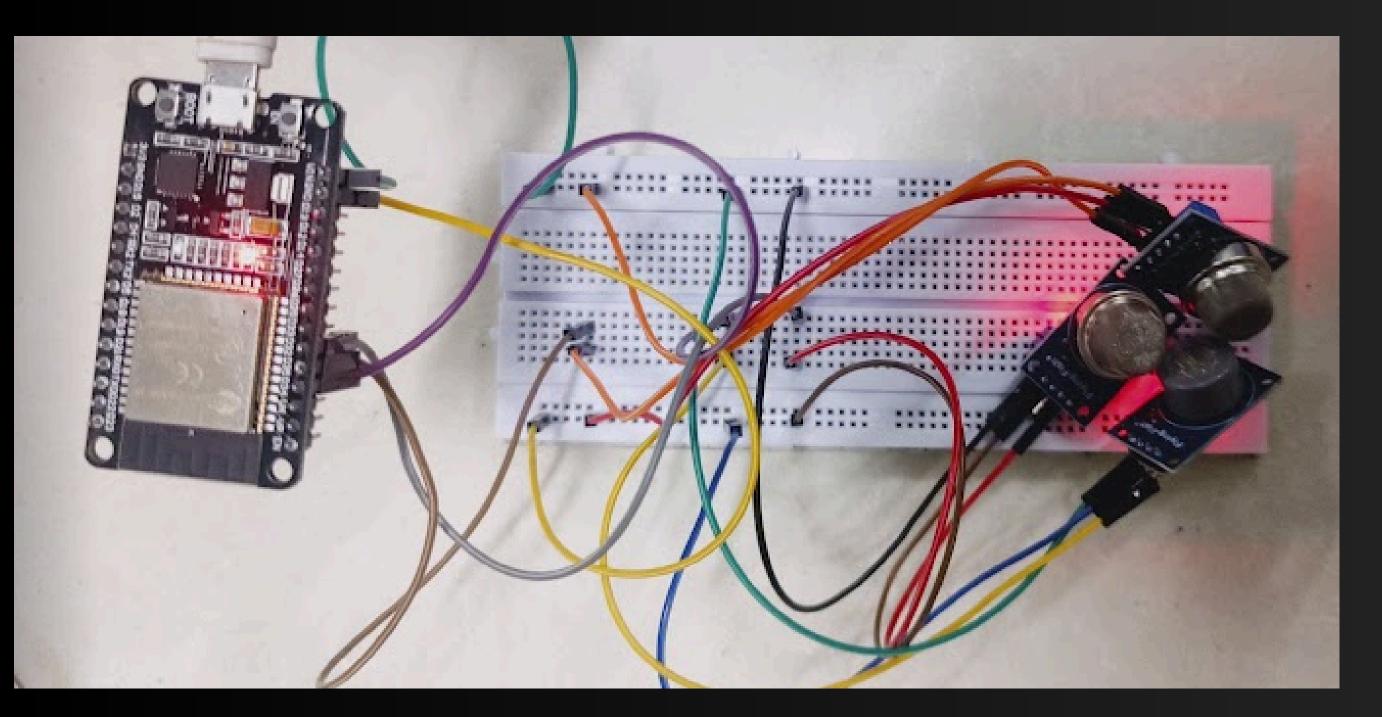
METHODOLOGY

Define the analog pins that are attached to the gas sensors(mq135, mq7, and mq2Pin). In the primary loop:

- 1. Read the MQ-135 sensor's analog value and save it in the variable mq135Value
- 2. Read the MQ-7 sensor's analog value and save it in the variable mq7Value.
- 3. Read the MQ-2 sensor's analog value and put it in the variable mq2Value
- 4.. Depending on the sensor specifications and calibration data, you can optionally execute calibration or further data processing on these raw analog values to convert them into useful gas concentration readings
- 5.. Print or use the values as needed (for example, printing to the serial monitor, sending data to a display, or sending across a network).



PROTOTYPE





DISCUSSION

Solution: Using a custom logic algorithm as named 'Cooldown mode' to avoid heating issue

Problem Faced:- Temperatures issue finding alternative solution using **DTH sensor** but cannot resist/ handle more heat

Requirement Gathering of available Existing system



ADVANTAGE

- Real time vehicle emission monitoring
- Portable and easy to setup
- Affordable
- Wifi support
- Mobile app support to notify service alert



OUTPUT





OBJECTIVE

- Identify and target vehicles that are emitting excessive pollution
- Protect public health
- Continuously monitor vehicle emissions
- Provide real-time data on vehicle emissions



DISADVANTAGE

- Data accuracy
- False positives:



CONCLUSION

These systems can gather information on car emissions in run time, allowing for the identification of high-emitting vehicles and the development of focused emission reduction plans. The effectiveness of emission control measures can be monitored using IOT-based systems, which can also give information for the creation of regulations. IoT-based vehicle emission monitoring and control systems can be expanded further and improved in a variety of areas.



SCAN QR CODE
FOR
ADDITONAL
DETAILS