

INDUSTRIAL GAS LEAKAGE MONITORING SYSTEM

A

Project report

Submitted in partial fulfillment of the requirement for the award of the degree of

BACHELOR OF TECHNOLOGY

BY

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DECLARATION BY THE CANDIDATE

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This is a record of bonafide work carried out by us and the results embodied in this project report have not been reproduced or copied from any source. The results embodied in this project have not been submitted to any other University or Institute for the award of any degree or diploma.

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CERTIFICATE

This is to certify that the project report entitled **“INDUSTRIAL GAS LEAKAGE MONITORING SYSTEM”** being submitted by **NADIMPALLY PRATHUL SAI GOUD (16VD1A0523), BUTTI AKHILA (16VD1A0502), DHONDI SAITEJA (16VD1A0538), SANDUGARI NAVANEETHA (16VD1A0519)**, in the partial fulfillment of the requirements for the award of the Degree of **BACHELOR OF TECHNOLOGY** in Computer Science and Engineering to the **JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD COLLEGE OF ENGINEERING MANTHANI** is a record of bonafide work carried out by them under my guidance and supervision.

The results of investigation enclosed in this report have been verified and found satisfactory. The results embodied in this project report have not been submitted to any other University or Institute for the award of any degree or diploma.

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ABSTRACT

Gas leakage in industrial area causes many health issues. Thus, to prevent such disasters happen, the atmosphere of a workplace should be regularly monitored and controlled, in order to maintain the clean air environment. However, efforts in industrial air quality control have been impeded by the lack of science-based approaches to identify and assess atmosphere air quality and level of dangerous gas.

Therefore, a monitoring system for gas leakage detection needs to be developed. For the development of this system, the combustible gas sensor (MQ9) was used in order to detect the present of methane (CH₄) and carbon monoxide gas (CO). This sensor will detect the concentration of the gas according to the voltage output of sensor and operated in the alarm system, autonomous control system and monitoring system by using NodeMCU as the microcontroller for the whole system. Where it will send the data reading from the gas sensor to monitoring system that display on Graphical User Interface (GUI).

CONTENTS

S.NO	NAME	PAGE NO
1	INTRODUCTION	1
2	LITERATURE SURVEY	3
	2.1 History of Internet of Things	4
	2.2 Applications of IOT	5
	2.3 What is IOT ?	9
3	SYSTEM ANALYSIS	11
	3.1 Existing System	12
	3.2 Proposed System	13
4	SYSTEM REQUIREMENTS	15
	4.1 Hardware Requirements	16
	4.2 Software Requirements	19
5	SYSTEM DESIGN	28
	5.1 Architecture Design	29
	5.2 Circuit Diagram	30
	5.2 Flowchart for explanation of code	31
6	CODING	32
	6.1 Sample Code	33
	6.2 Connection of Pins	35
7	TESTING AND VALIDATION	36
	7.1 Types of testing	37
	7.2 Test strategy and approaches	38
	7.3 Test cases	38
	7.3.1 TC-DAR1	38
	7.3.2 TC-DAR11g	39
8	SCREENSHOTS	40
9	CONCLUSION	47
10	BIBLIOGRAPHY	49