

**MICROCONTROLLER BASED REMOTE FIRE OUTBREAK  
MONITOR.**

**BY:**

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## CERTIFICATION

This is to certify that this project work titled “Microcontroller based remote fire outbreak monitor and fighter” is a genuine and originally researched work carried out by Chibuoke Ifunanyachi Precious with registration number CE\2007\201 in the Department of Computer Engineering. The project is accepted in partial fulfillment of the requirement of the award of B.Eng. in computer engineering under the supervision of Engr. Tony Nsodukwa

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Date

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(Head of Department)

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External Examiner

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Date

## DEDICATION

This project work is dedicated to our Lady Mother of Mercy, My Guardian Angel and Sacred Heart of Jesus for their protection, care, love and mercy also my beloved parents and friends.

## ACKNOWLEDGEMENT

I am grateful to Almighty God for his Graces and mercies shown to me especially during my stagnant times of emotional stress on what to do on the project.

My profound and sincere gratitude goes to my project supervisor Engr. Tony Nsodukwa, Engr. Obi and Engr. Calista Mba for their academic directions and advice throughout the project work.

I can't forget those that gave me a pat at the back to move forward in the persons of Chief and Lolo CC Chibuoke and my roommates for their support and prayers.

## ABSTRACT

Micro-controller based remote fire outbreak monitor is a system for monitoring and controlling of fire outbreak with the use of micro controller. The design requires both the effective workings of the hardware components, software and an interfacing to enable the micro controller to control the external devices. The monitor uses two more data transmission in a fire alarm and detection system. A linear voltage monitoring mechanism is within each wiring or contact monitoring circuit such that the exact value at any time variation of the source voltage is known. The monitoring current resulting from the monitoring arrangement is strictly a function of impedance and not a function of source voltage because a line monitoring scaling factor is incorporated into the final calculation. The monitoring scheme also results in the alarm and trouble voltage thresholds being suitably altered to take account of changed line voltage conditions.

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