



Fire Fighter Robot



A PROJECT REPORT

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BONAFIDE CERTIFICATE

Certified that this project report titled “**Fire Fighter Robot**” is the bonafied work of “**IZAS AHMED L,KARUNAKARAN S,KISHORE KUMAR G,NANDHA KUMAR C**” who carried out the project work under my supervision.

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ABSTRACT

The objective of this project is to operate the robot for detecting the fire. This project is very useful in manufacturing industries and fireworks industries, textiles and military applications for detecting the fire and controls it through water. This project also improves the security performance. We have used flame sensor and ATMEL controller in this project. The flame sensor is used to detect the flame occurrence. When the sensor detects the fire then it became short-circuit. When there is no fire the sensor become open circuit. The AT89S52 is a low-power, high-performance CMOS 8-bit microcontroller with 8K bytes of in-system programmable Flash memory. Robot along with water tank supply is made to move in a line follower with the help of motor. Motor is driven by driver circuit which is controlled by ATMEL controller.

LIST OF ABBREVIATIONS

PIC	Peripheral interface controller
RISC	Reduced Instruction Set Computer
EEPROM	Electrically Erasable Programmable Read Only Memory
SRAM	Static Random Access Memory
JTAG	Joint Test Access Group
LED	Light Emitting Diode
LCD	Liquid Crystal Display
VB	Visual Basic
IDE	Integrated Development Environment
API	Application Programmable Interface
GUI	Graphical User Interface
COM	Component Object Model
ICS	In Circuit Simulators
JVM	Java Virtual Machine

AVR	Advanced Virtual RISC
DTE	Data Terminal Equipment
DCE	Data Circuit-terminating Equipment