

Fire Fighting Robot

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Abstract: *This project, titled "Fire Fighting Robot," focuses on the design and development of an automated robotic system capable of detecting and extinguishing fire in hazardous environments. The robot is equipped with flame sensors, microcontroller-based control systems, and a water pump mechanism that allows it to move toward the fire source and extinguish it automatically.*

The main objective of the project is to minimize human risk during fire accidents by using robotic technology. The system uses sensors to detect fire and a motor driver circuit to control the robot's movement. Once the flame is detected, the robot moves in the direction of the fire and activates a water pump to extinguish it.

This robot can be used in places such as industries, warehouses, homes, and offices where fire accidents may occur. The project demonstrates how robotics and embedded systems can be applied to improve safety and disaster management.

Keywords: Fire Fighting Robot, Embedded System, Flame Sensor, Robotics, Fire Detection

