

# Texture Analysis of Smoke for A Review on Early Forest Fire Analysis

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**Abstract:** *The environmental challenges facing the planet today haven't been greater or more complex. Global areas covered by forest and concrete woodlands are threatened by natural disasters that have increased considerably over the past decades, both in terms of frequency and magnitude. Large-scale fires are one of the most damaging natural hazards affecting global climate change and life around the world. To minimize their impact on people and nature, it is necessary to adopt effective methods of prevention, warning and response, strategically and closely coordinated. This paper presents an outline of optical remote sensing technologies used in early fire warning systems and supplies an in-depth survey on both flame and smoke detection algorithms employed by each technology. This project gives the prevention of using Temperature detector LM35 and Gas sensor. After the fire is detected, the device makes an alarm sound and automatically turns on the buzzer.*

**Keywords:** Forest Fire, Gas Sensor, Arduino, GSM, Temperature Detector LM35 Sensor, IoT, Buzzer, Pump Motor, etc.

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