

## **ABSTRACT**

*Fire accident is a disserve event. Aside from losing materials, fire accident can also be casualties. Many efforts have been done to prevent, one of them is automatic fire suppression system. A fire suppression system that is widely used caontains smoke and temperature sensors. However can these efforts improve safety for the people?*

*Based on the above problems, this thesis proposes a development of automatic fire security system. The system will map out a room into several small spaces. The proposed method is the image processing method. The author uses raspberry mini computer that processes capturing of data image.*

*A supression of fire from this system, supressing a fire at fire spot space using water. When a fire is indicated in that room, system will detect the space which presences a fire. Then system will activates a solenoid valve at fire indicated space. The goal is to prevent the spread of fire and make using of water efficiently. That system can streamline the determination of the water at one point the fire simulation*

*Using the image processing method obtained value H: 34-37, S: 5-6, V: 238-240 were a fire brand value. The system was designed to be able for opening the waterway when a fire is detected in the room. From test results of this design, the system opens the waterway with a success rate of 94%. Therefore, this system can be used as an initial step of handling the spread of fire.*

***Keywords: Fire spot space, Raspberry, Image Processing, Camera, Solenoid valve.***