

# F.I.R.E.

Fire Intelligent Robot Extinguisher  
By  
Natthapol Prakongpan  
<http://nat.homelinux.net/eel5666>

## Goal

- ☞ Find a fire
- ☞ Extinguish it
- ☞ Avoid obstacles

## Sensors

- ☞ Bumper Switch
- ☞ Ultrasonic Range Finder
- ☞ Compass
- ☞ Pyro Sensor
- ☞ Voltmeter

## Fire Detection

- ☞ Pyro generates 10ms pulse when it detects flame.
- ☞ Reduce the field of view down using shrink tubing
- ☞ Use SONAR to get the range of the candle

## Compass

- ☞ Compass is used to hold heading when fire is detected
- ☞ I2C interface (real easy after initialization)

## Movie Clip

QuickTime™ and a decompressor are needed to see this picture.