

Presence awareness for MythTV

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MythTV Miniconf, LCA2009



The image shows a silver computer monitor with a black bezel. The screen displays the SuperHouse logo, which consists of a teal house icon inside a circle, followed by the text "SuperHouse" in a bold, teal, sans-serif font. The monitor is positioned on a white surface, and the background is white.

SuperHouse

Jon's first rule
of UI design

The best UI
is no UI

motion detector



~~motion~~ ~~detector~~



IR beacon

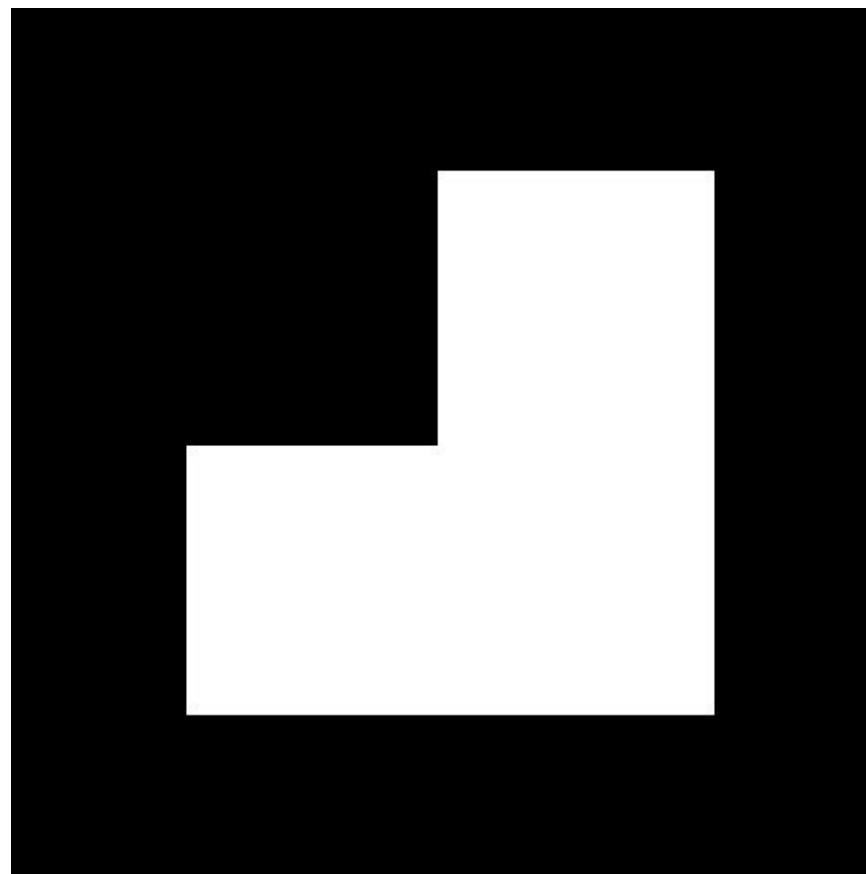


bluetooth

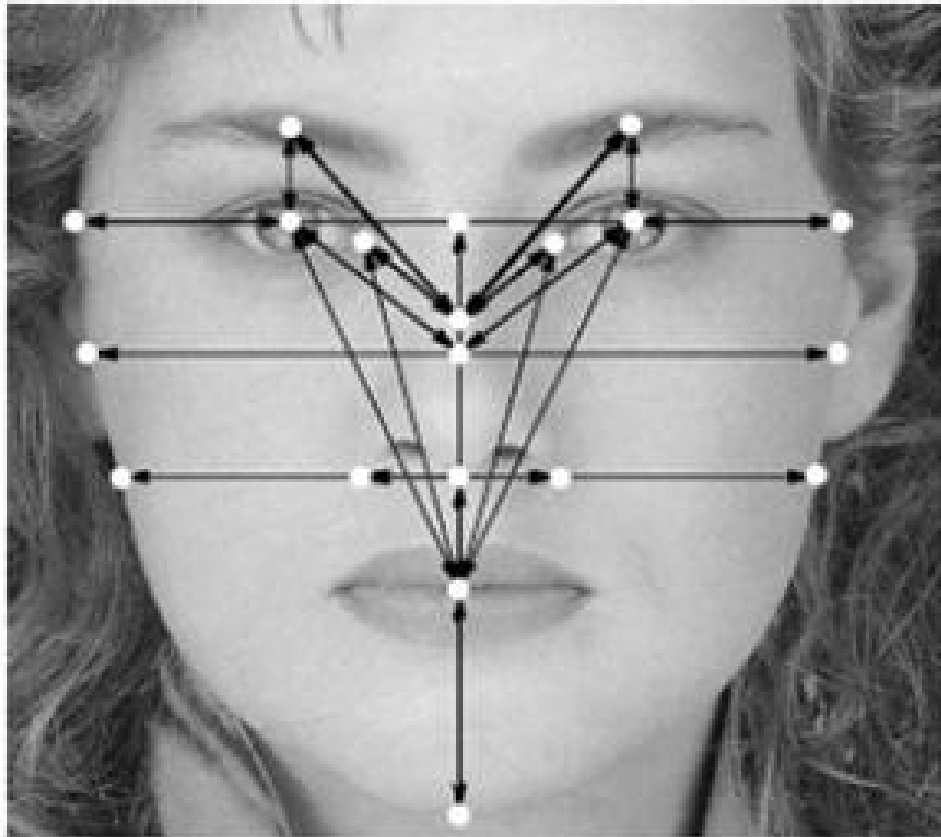


glyph

recognition



facial recognition



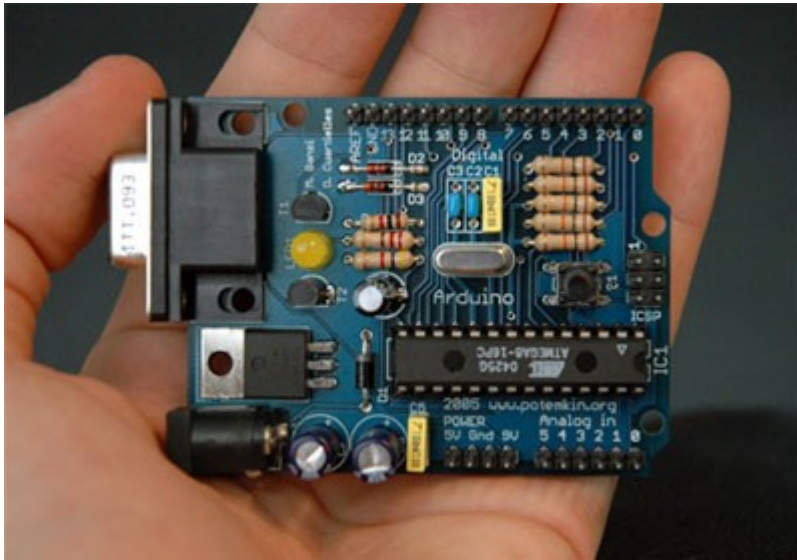
Motion detector

IR beacon

Bluetooth

Glyph recognition

Facial recognition



```
File Edit View Search Tools Documents Help
New Open Save Print... Undo Redo Cut Copy Paste Find Replace
irreader.pde x
/*
 * MythPresence IR Bridge
 * by Jonathan Oxe <jon@oxer.com.au>
 *
 * Reads an input attached to a relay on an IR light beam receiver. If the
 * beam is unbroken it sends a value of 1, if the beam is broken it sends 0.
 * Loops once per second.
 *
 * For www.superhouse.tv
 */

int ledPin = 13;           // Display LED to indicate input status
int inputPin = 2;         // Pin for IR receiver relay (pull-down to gnd,
                          // relay to 5V)
int val = 0;              // Variable for reading the pin status

void setup() {
  pinMode(ledPin, OUTPUT); // Declare LED as output
  pinMode(inputPin, INPUT); // Declare input
  // Set up t
  Serial.begin(9600);
}

void loop(){
  val = digitalRead(inputPin);
  if (val == HIGH) {
    digitalWrite(ledPin, HIGH);
    Serial.println("Beam broken");
  } else {
    digitalWrite(ledPin, LOW);
    Serial.println("Beam unbroken");
  }
  delay(1000);
}

#!/usr/bin/php
<?php
// Open serial connection to the Arduino board that is reporting
// status of the IR detector
$fp = fsockopen("tcp://127.0.0.1", 2000, $errno, $errstr, 30);
while (!feof($fp))
{
  $rawdata = trim(fgets($fp, 2));
  echo $rawdata;
  if($rawdata == 0)
  {
    $absencecount++;
  } else {
    $absencecount = 0;
  }

  if($absencecount == 3)
  {
    echo "Sending pause command\n";
    send_command("play speed pause");
    $laststate = "pause";
  } elseif (($absencecount == 0) && ($laststate == "pause")) {
    echo "Sending play command\n";
    send_command("play speed normal");
    $laststate = "play";
  }
}
fclose($fp);

function send_command($command)
{
  $fp = fsockopen("tcp://192.168.1.107", 6546, $errno, $errstr, 2);
  fputs($fp, $command."\n");
}
Ln 13, Col 33 INS
```

Jon, you're
an idiot

**I'M WITH
STUPID**







*That's
not
all,
folks!*



Multi-room

MythTV:

“follow me”

Presence loss:

'query location'

parse and log

Presence gain:
read log, then
'play program *CHANID DATE*'

Problems...



No

'play video PATH hh:mm:ss'

command

GAME OVER

Blog:

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Flames:

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SuperHouse:

superhouse.tv

**I'M WITH
STUPID**

