PRAYER OF WIND AND BLOOM

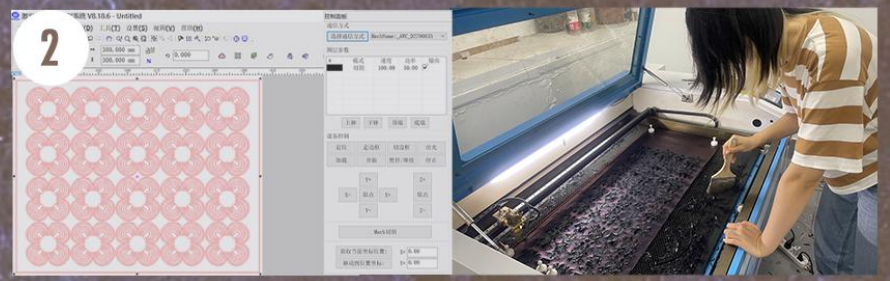
THIS IS AN INTERACTIVE INSTALLATION. WHEN WIND FLOWS THROUGH THE SPACE, THE AIRFLOW SENSOR DETECTS IT AND GRADUALLY ILLUMINATES THE LIGHTS, CREATING A BREATHING LIGHT EFFECT. AS THE LIGHTS FIRST GLOW, THE SOUND SENSOR SIMULTANEOUSLY ACTIVATES, PLAYING THE DONG GRAND SONGS. THE WORK EXPLORES THE THEME OF DIVINE WORSHIP IN DONG CULTURE: THE FLORAL PATTERN SYMBOLIZES THE FLOWER DEITY, WHILE THE WIND REPRESENTS THE WIND DEITY. THE EBB AND FLOW OF THE LIGHT AND THE MOVEMENT OF THE PATTERNS REFLECT THE VITALITY OF NATURE, WHILE SOUND—AN ESSENTIAL PART OF RITUALS AND BLESSINGS—ACTS AS A BRIDGE FOR COMMUNICATION WITH DEITIES. THIS INSTALLATION VIVIDLY PORTRAYS THE HARMONIOUS CONNECTION BETWEEN HUMANS AND NATURE.

PATTERN DESIGN

DONG BRIDAL ATTIRE

MANY **FOLK CUSTOMS** ARE ASSOCIATED WITH THE FLOWER GODDESS, TRADITION MENTIONED IN DREAM OF **THE RED CHAMBER**, WHERE WOMEN DRESS UP TO HONOR HER. THIS **FLORAL PATTERN** DRAWS INSPIRATION FROM THESE RICH TRADITIONS.

THIS PATTERN IS INSPIRED BY THE FLORAL MOTIFS FOUND IN **DONG BRIDAL ATTIRE**, SYMBOLIZING THE **FLOWER GODDESS**. THE DONG PEOPLE PRACTICE POLYTHEISTIC BELIEFS, WITH TTOF THE MOST SIGNIFICANT DEITIES BEING **"SA SUI"** OR "SA MA," A LEGENDARY **FEMALE HERO**. THE FLOWER GODDESS, AN INTEGRAL PART OF THIS BELIEF SYSTEM, BLESSES WOMEN WITH **HEALTH AND FERTILITY**.



LASER CUTTING INTERFACE

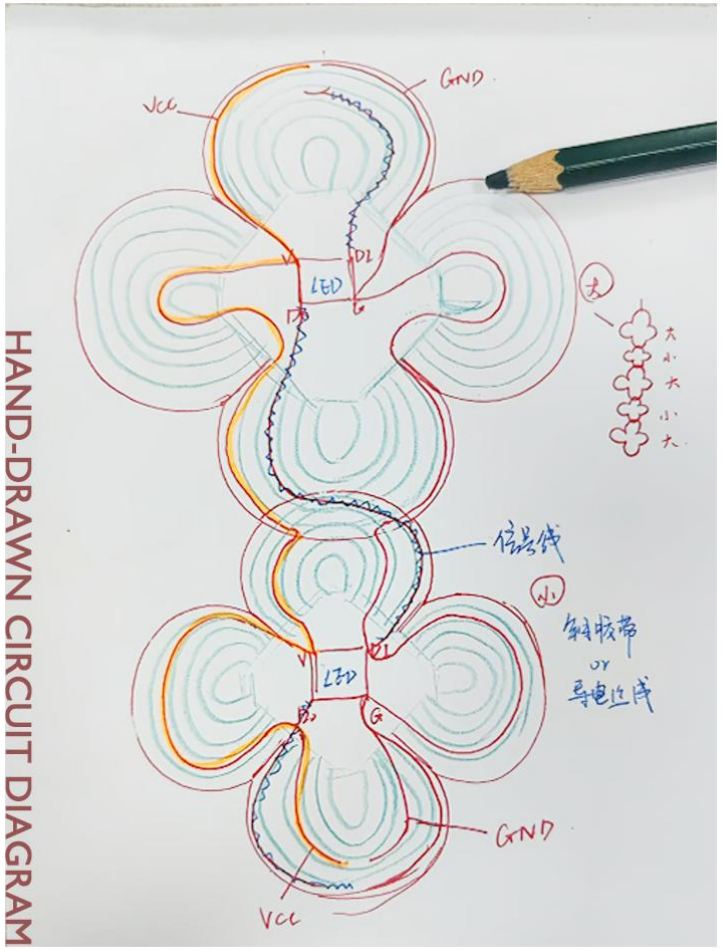
FABRIC TRIAL

4 GRAPHIC ATTEMPT

THE FINAL FABRIC CHOSEN FOR THE WORK IS DONG PEOPLE'S BRIGHT CLOTH. THIS CLOTH IS ENTIRELY **HANDMADE**, WOVEN WITH **NATURAL HERBAL PLANTS**, AND THE DYES AND ADHESIVES ARE ALL NATURAL MATERIALS. THIS FABRIC WAS SELECTED NOT ONLY BECAUSE IT IS A **TYPE** OF CLOTH WORN ON **IMPORTANT OCCASIONS** BUT ALSO TO EXPRESS THE CONNECTION BETWEEN NATURE, DEITIES AND HUMANS.

SOFT CIRCUIT DESIGN

THE DESIGN ADOPTS A MODULAR AND LAYERED APPROACH, ENSURING CLEAR SEPARATION OF VCC, GND, AND SIGNAL PATHS TO AVOID INTERFERENCE AND ENHANCE CIRCUIT EFFICIENCY.

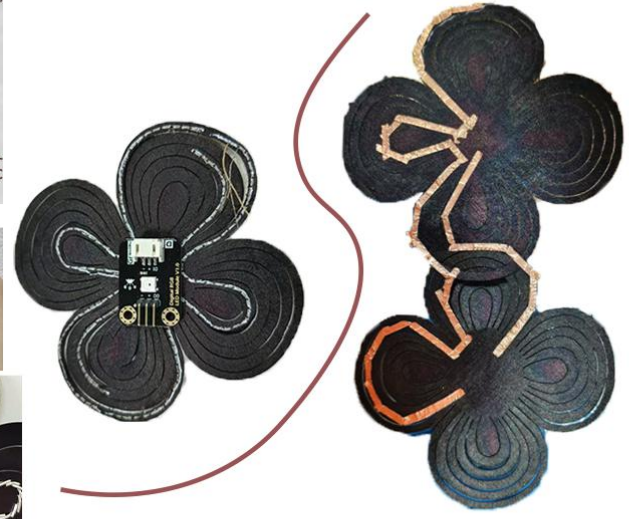


HAND-DRAWN CIRCUIT DIAGRAM

SEWING PROCESS

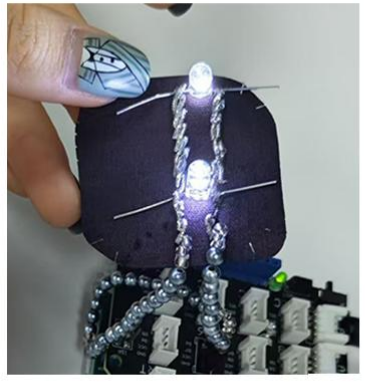
DETAIL

LED MODULE TEST

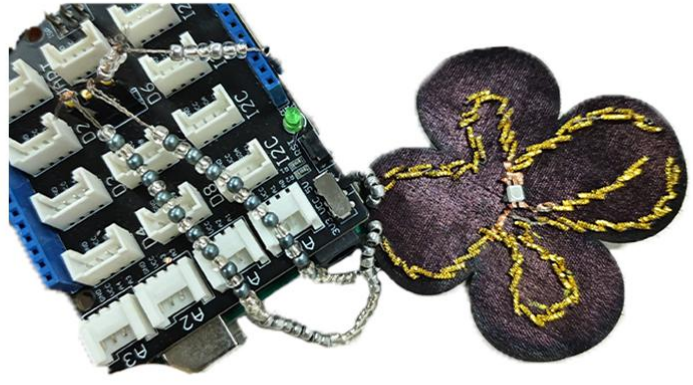


CONDUCTIVE COPPER TAPE TEST

THIS CHOICE BRIDGES THE GAP BETWEEN TRADITIONAL CRAFTSMANSHIP AND MODERN TECHNOLOGY, BLENDING INDIA'S EMBROIDERY ART WITH EMERGING SOFT ELECTRONICS TO EXPLORE CROSS-CULTURAL DESIGN POSSIBILITIES.



FLEXIBLE CIRCUIT TEST



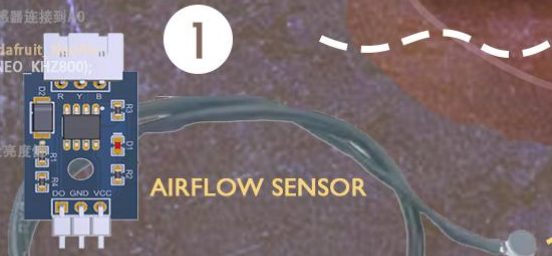
FLEXIBLE CIRCUIT AND LED BULBS

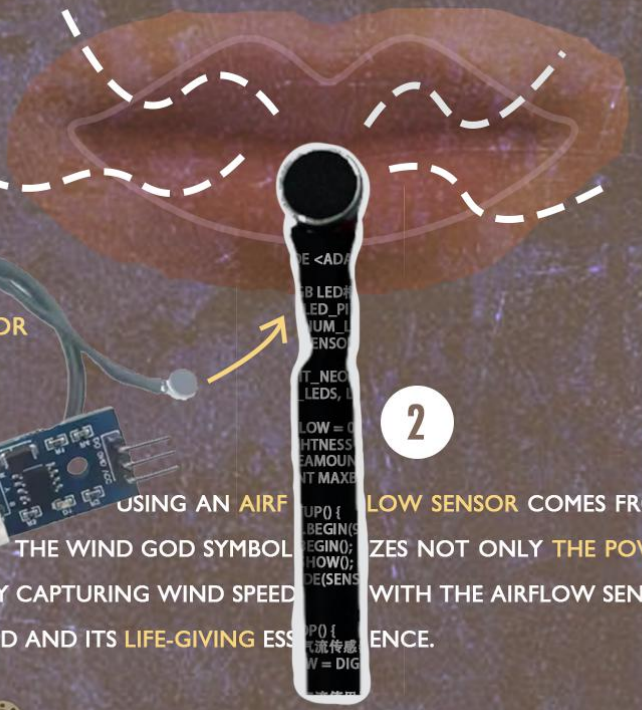
FINAL SUCCESSFUL SCENE

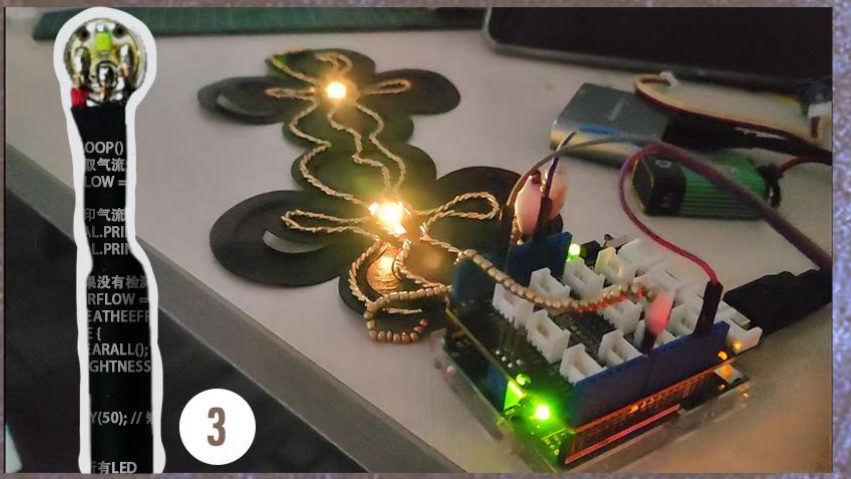
SENSORS & INTERACTION

```
#include <SoftwareSerial.h>
SoftwareSerial mySerial(10, 11); // RX, TX
#define PLAY_TOUCH_PIN A0
#define VOLUME_TOUCH_PIN A1

bool lastPlayTouchState = false;
bool lastVolumeTouchState = false;
bool isPlaying = false;
bool isMuted = false;
unsigned char originalVolume = 0x1E; // 原始音量，最大值

void setup() {
  Serial.begin(115200);  // 用于调试输出
  Serial1.begin(9600);
  pinMode(PLAY_TOUCH_PIN, INPUT);
  pinMode(VOLUME_TOUCH_PIN, INPUT);

  Serial.println("初始化语音模块");
  setVolume(originalVolume); // 设置初始音量
  delay(1000);
  Serial.println("初始化完成");
}

void loop() {
  bool playTouchState = digitalRead(PLAY_TOUCH_PIN) == HIGH;
   bool volumeTouchState = digitalRead(VOLUME_TOUCH_PIN)
== HIGH;

  // 处理播放/暂停触摸
  if (playTouchState && !lastPlayTouchState) {
    if (isPlaying) {
      pauseAudio();
      isPlaying = false;
    } else {
      playAudio(0x01);  // 播放 0001.mp3
      isPlaying = true;
    }
    delay(50);  // 消抖
  }

  // 处理音量触摸
  if (volumeTouchState && !lastVolumeTouchState) {
    if (isMuted) {
      Serial.println("恢复音量");
      setVolume(originalVolume);
      isMuted = false;
    } else {
      Serial.println("静音");
      setVolume(0x00);
      isMuted = true;
    }
    delay(50);  // 消抖
  }

  lastPlayTouchState = playTouchState;
  lastVolumeTouchState = volumeTouchState;
}

void playAudio(unsigned char track) {
  Serial.println("播放音频: " + String(track) + ".mp3");
                  unsigned          char          play[6]
{0xAA,0x07,0x02,0x00,track,track+0xB3};
  Serial1.write(play,6);
}

void pauseAudio() {
  Serial.println("暂停/停止音频");
  unsigned char pause[4] = {0xAA,0x04,0x00,0xAE};
  Serial1.write(pause,4);
}

void setVolume(unsigned char vol) {
  Serial.println("设置音量: " + String(vol));
  unsigned char volume[5] = {0xAA,0x13,0x01,vol,vol+0xBE};
```

```
#include <Adafruit_NeoPixel.h>

// 定义RGB LED相关参数
#define LED_PIN    7       // LED连接到D7端口
#define NUM_LEDS   2       // LED数量
#define SENSOR_PIN A0      // 气流传感器连接到 A0

Adafruit_NeoPixel strip = Adafruit_NeoPixel(NUM_LEDS, LED_PIN, NEO_GRB + NEO_KHZ800);

int airflow = 0;           // 气流状态
int brightness = 0;        // 当前亮度
int fadeAmount = 5;        // 渐变步长
const int maxBrightness = 150; // 最大亮度限制

void setup() {
  Serial.begin(9600);
  strip.begin();
  strip.show();
  pinMode(SENSOR_PIN, INPUT);
}

void loop() {
  // 读取气流传感器的值
  airflow = digitalRead(SENSOR_PIN);

  // 打印气流值用于调试
  Serial.print("airflow= ");
  Serial.println(airflow, DEC);

  // 如果没有检测到气流
  if (airflow == LOW) {
    breatheEffect();
  } else {
    clearAll();
    brightness = 0; // 重置亮度值
  }

  delay(50); // 短暂延时以保持稳定
}

// 清除所有LED
void clearAll() {
  strip.clear();
  strip.show();
}

// 橙黄色呼吸灯效果
void breatheEffect() {
  brightness = brightness + fadeAmount;
  if (brightness <
yy s= 0 || brightness >= maxBrightness) {
    fadeAmount = -fadeAmount;
  }

  // 设置橙黄色呼吸效果 (R:255, G:180, B:0)
  for(int i=0; i<NUM_LEDS; i++) {
    int r = (brightness * 255) / maxBrightness;
分量
    int g = (brightness * 180) / maxBrightness; // 绿
色分量
    int b = 0;                                  // 蓝色分量
    strip.setPixelColor(i, strip.Color(r, g, b));
  }
  strip.show();
}
```



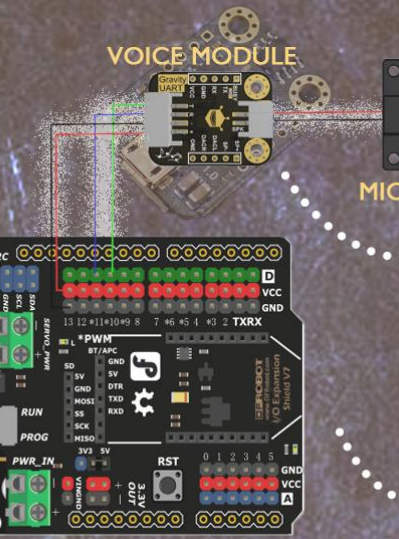


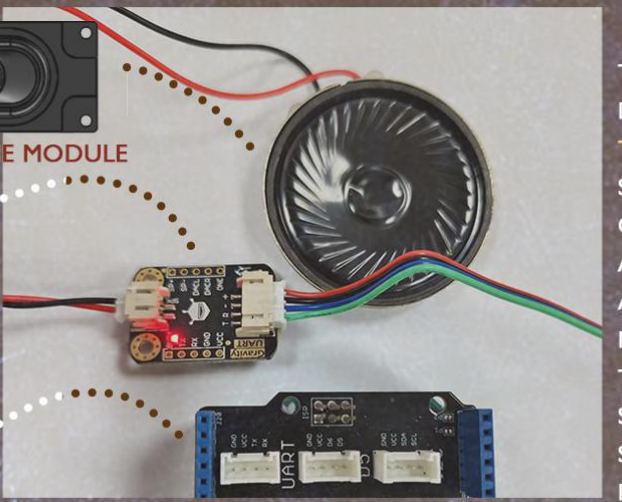


INSPIRATION

↓

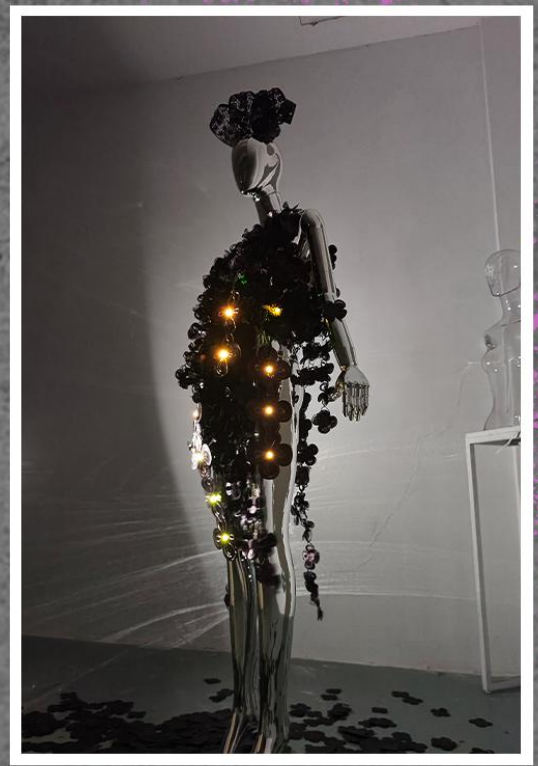
THE I[illegible]ION FOR [illegible]USING AN AIRF[illegible]LOW SENSOR COMES FROM THE DONG ETHNIC CULTURE'S REVERENCE FOR THE WIND GOD. IN DONG BELIEF[illegible], THE WIND GOD SYMBOL[illegible]ZES NOT ONLY THE POWER OF NATURE AND DIVINE PROTECTION BUT ALSO THE FORCE THAT BRINGS LIFE TO FLOWERS. BY CAPTURING WIND SPEED[illegible] WITH THE AIRFLOW SENSOR AND EXPRESSING IT THROUGH LIGHT, I AIM TO SHOWCASE THE DYNAMIC BEAUTY OF THE WIND AND ITS LIFE-GIVING ESS[illegible]ENCE.





THE DONG GRAND SONGS ARE A VITAL PART OF DONG CULTURE, REFLECTING BOTH FOLK TRADITIONS AND THEIR CLOSE TIES TO SPIRITUAL WORSHIP. TRADITIONALLY, THESE SONGS ARE NOT ONLY A MEANS OF EMOTIONAL EXPRESSION BUT ALSO SERVE AS SIGNIFICANT RITUALS FOR WORSHIP AND BLESSINGS, ACTING AS A BRIDGE TO COMMUNICATE WITH DEITIES. BY USING A VOICE SENSOR TO TRIGGER THE PLAYBACK OF DONG GRAND SONGS, I AIM TO HIGHLIGHT THE CULTURAL ESSENCE OF "SINGING AS A PATHWAY" IN DONG TRADITIONS.

THE FINAL PRESENTATION



THE VISUALS SHOWCASE THE FUNCTIONALITY AND CULTURAL ESSENCE OF THE INTERACTIVE INSTALLATION. AS THE WIND FLOWS, THE LIGHTS BREATHE IN RHYTHM WITH THE AIR CURRENTS, AND THE MELODIES OF THE DONG GRAND SONG GENTLY EMERGE, GUIDING THE AUDIENCE INTO A MYSTICAL REALM WHERE NATURE AND FAITH INTERTWINE. THE FLOWING PATTERNS AND LIGHTS SYMBOLIZE THE GROWTH OF NATURE, WHILE THE SOUNDS EVOKE THE ANCIENT RITUALS OF PRAYER AND BLESSINGS. THIS IS A DIALOGUE BETWEEN WIND AND BLOSSOM, A RESONANCE BETWEEN HUMANS AND NATURE.