



MAKING INTERACTIVE ART

Fay Shaw

*Women Who Code
February 20, 2017*

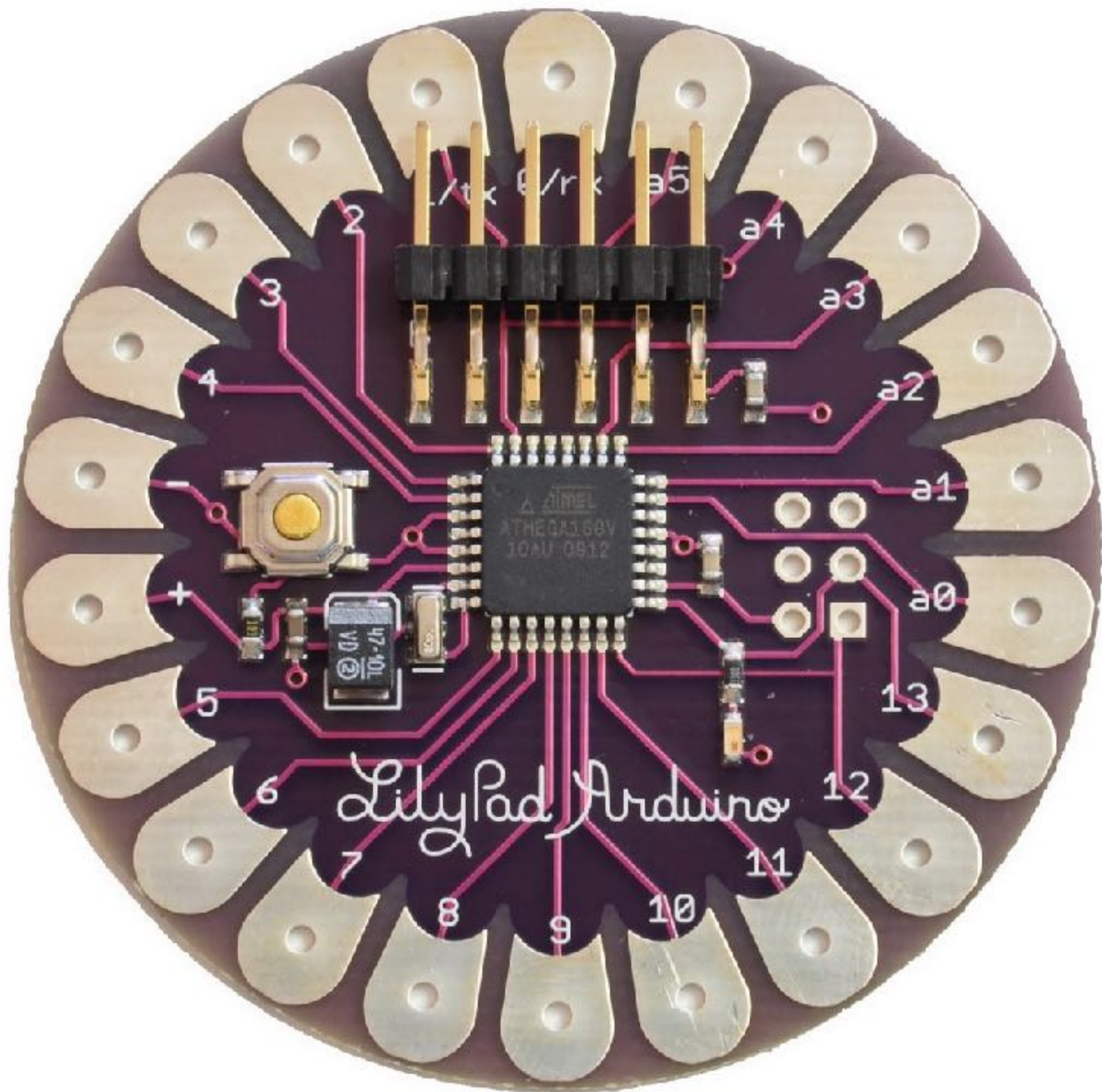
BACKGROUND

- Researcher at the Tufts Center for Engineering Education
- Senior Research Scientist at Joulez
- PhD Mechanical Engineering, University of Washington

IN THE BEGINNING

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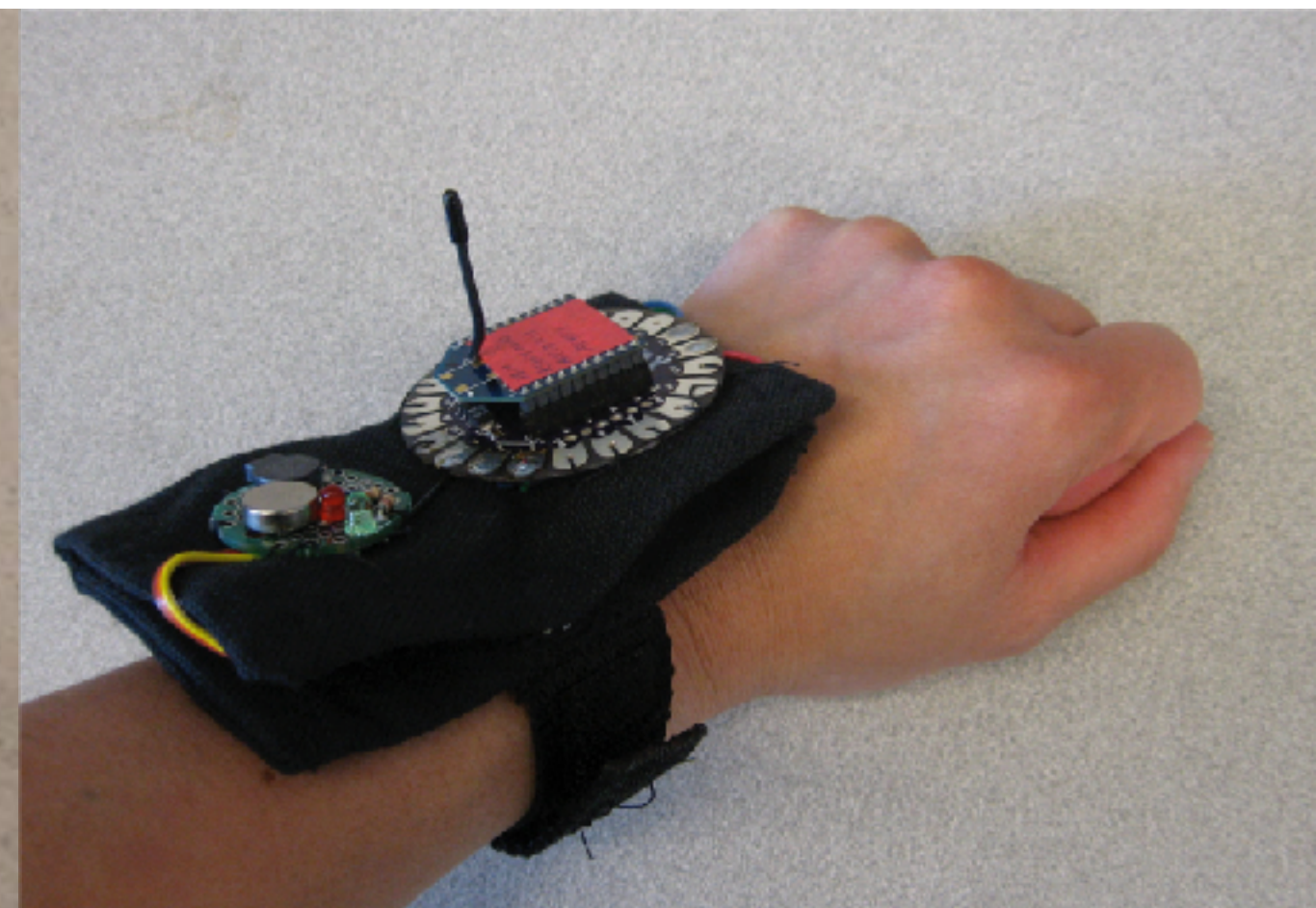
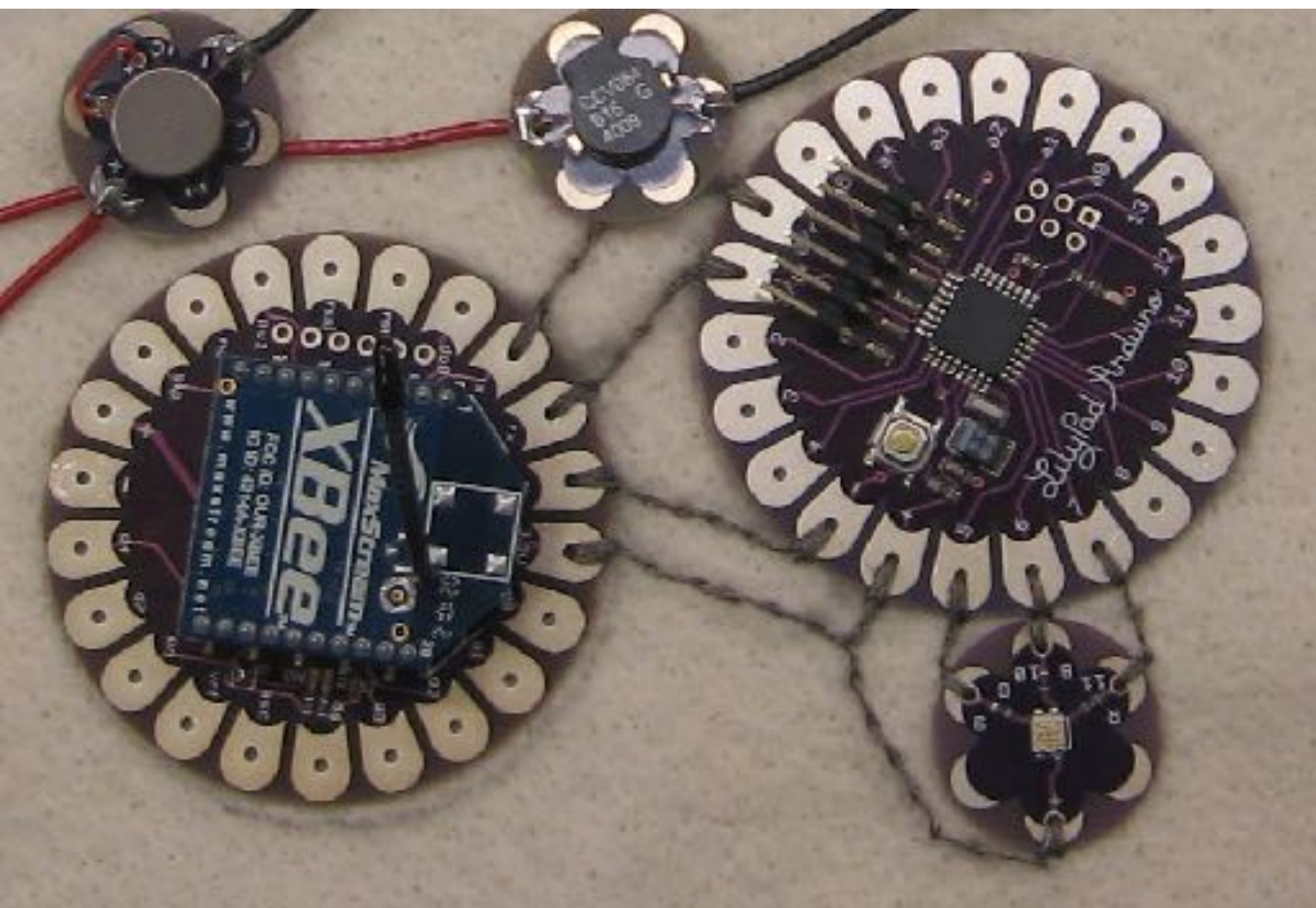


GROUPER, WEARABLE WIRELESS GROUP COORDINATOR

conductive thread prototype

wearable prototype

vibe motor LilyPad Arduino
speaker microcontroller



XBee radio

RGB LED

DEMO

FOREST FIELD INTERACTIVE DANCE

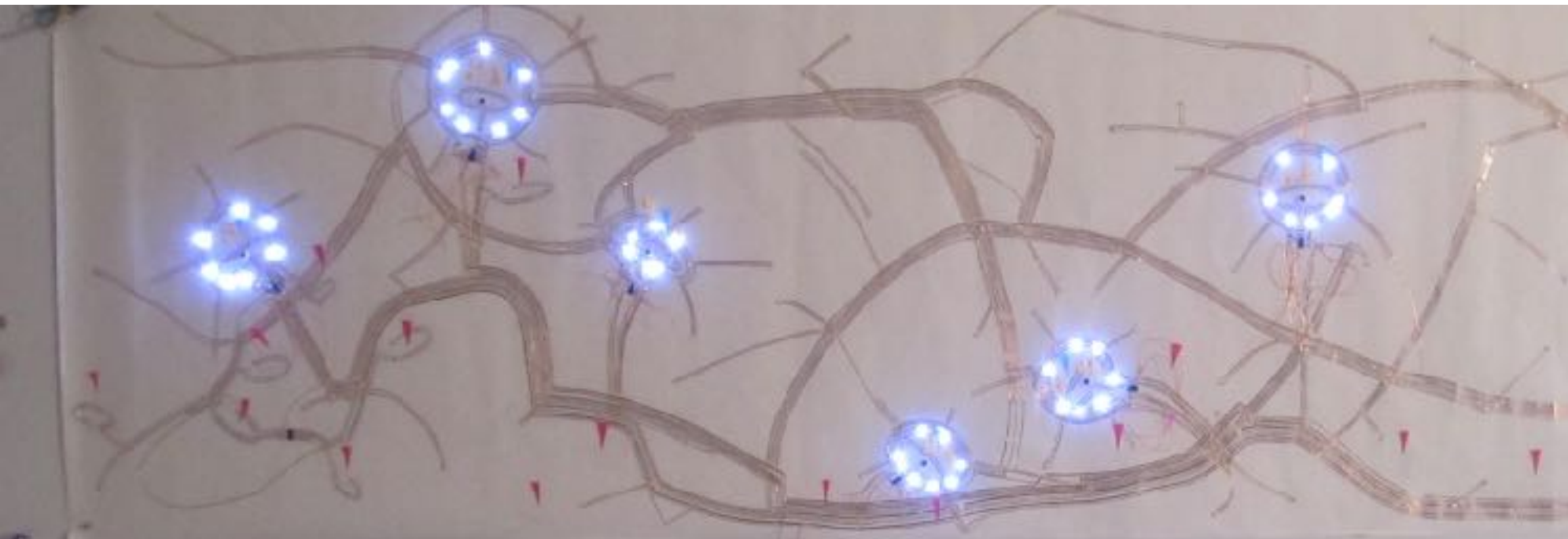


LilyPad Arduinos + XBees+ Processing

Robert Talamentez, dancer and freelance web developer

forestfieldinteractive.com

INTERACTIVE PAINTING



Pu Gong Ying Tu (Dandelion Painting) technoljie.com/pu-gong-ying-tu-dandelion-painting
microcontrollers + microphones + surface mount (tiny) LEDs + copper tape

INTERACTIVE PAINTING



WEAVING



The fog has cleared.

You are in a room. The tile floor is cool beneath your feet. Tall arches reach above you, disappearing into the misty heavens. A fountain is before you, its clear waters overflowing its basins and flowing out the open arches where sunlight streams in. Beside the fountain, on the ground, is a golden cup.

What will you do?

Approach the fountain.

Gaze upwards to the clouds.

Peek outside, through the arches.

Turn around and walk away.

Loominary
Anne Sullivan, University of Central Florida
rigid heddle loom + Raspberry Pi + RFIDs
loominary.info



ARDUINO

every
program
needs
these two
functions



The screenshot shows the Arduino IDE interface. The title bar reads "Blink | Arduino 1.6.5". The menu bar includes "File", "Edit", "Tools", and "Help". The toolbar contains icons for opening, saving, and running. The "Blink" tab is active, displaying the following code:

```
/*  
 * Blinks onboard LED on one second, off one second  
 */  
  
int LEDpin = 13;  
  
void setup() {  
  // put your setup code here, to run once:  
  
  pinMode(LEDpin, OUTPUT);  
}  
  
void loop() {  
  // put your main code here, to run repeatedly:  
  
  digitalWrite(LEDpin, HIGH); // turn the LED on  
  delay(1000);                // wait for a second  
  digitalWrite(LEDpin, LOW);  // turn the LED off  
  delay(1000);  
}  
  
|
```

Below the code editor, the console shows a message: "Done Saving." followed by an error: "The sketch name had to be modified. Sketch names can only consist of ASCII characters and numbers (but cannot start with a number). They should also be less than 64 characters long."

THANK YOU!



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@bitwiseowl