

MOOD PAINT

**FROM SIGNAL
TO CANVAS**

Interactive art generated from
biometric data.

Emma Yañez



VIDEO

"Good night. Good night! parting is such sweet sorrow,
that I shall say good night till it be until morrow.
Shakespeares's Romeo and Juliet.

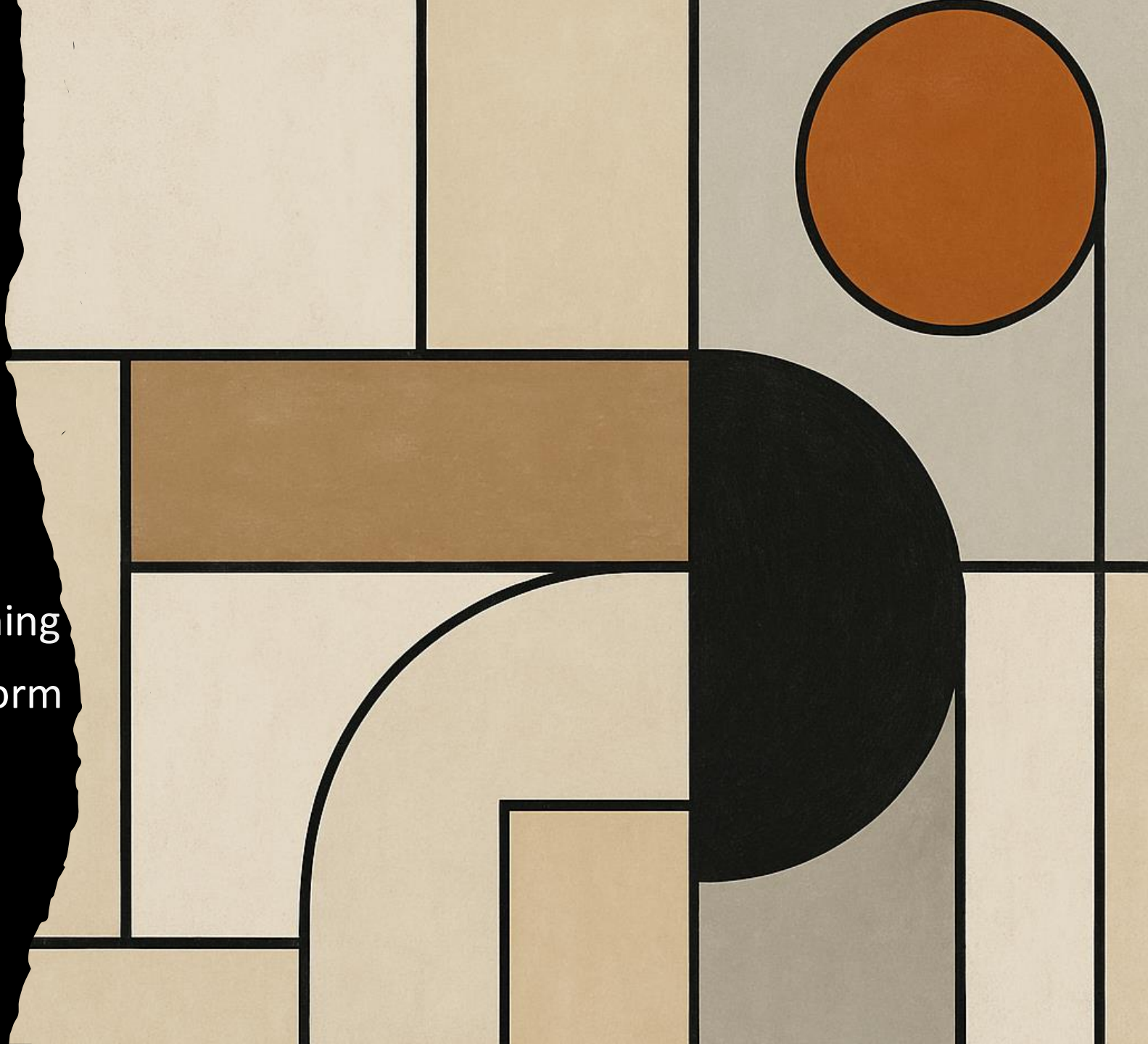
[EmmaYanez_MOODPAINT_FabLableon](#)



HAVE YOU EVER
IMAGINED YOUR
MOODS SHIFTING
AS COLORS AND
SHAPES?

BIO-RESPONSIVE PAINTING SYSTEM

Mood Paint is a system that allows participants to see their emotions materialize as digital paintings, turning their own biometric signals into a form of generative art.



MODES OF INTERACTION

Exhibition Mode — The Bracelet

Personal Mode — The Glove

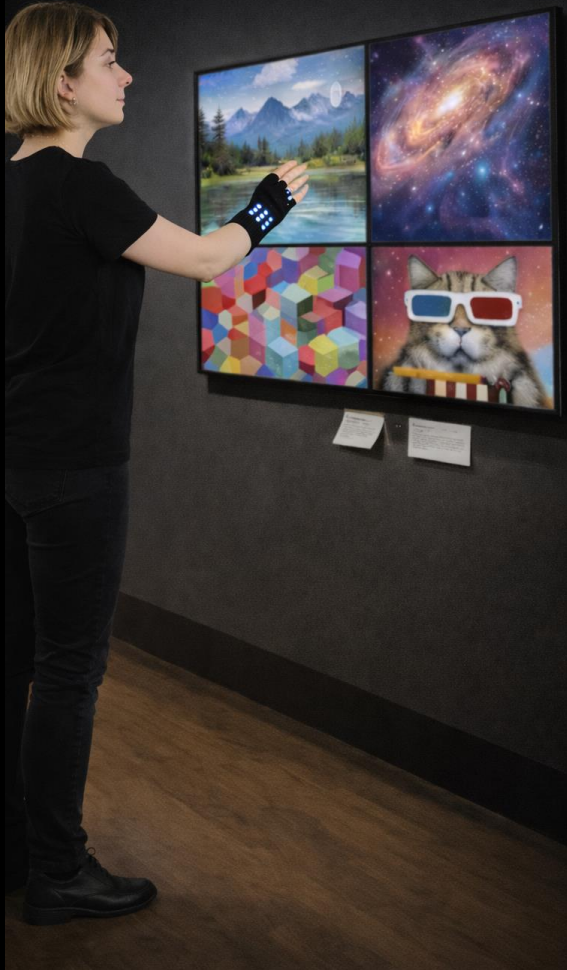


USER EXPERIENCE

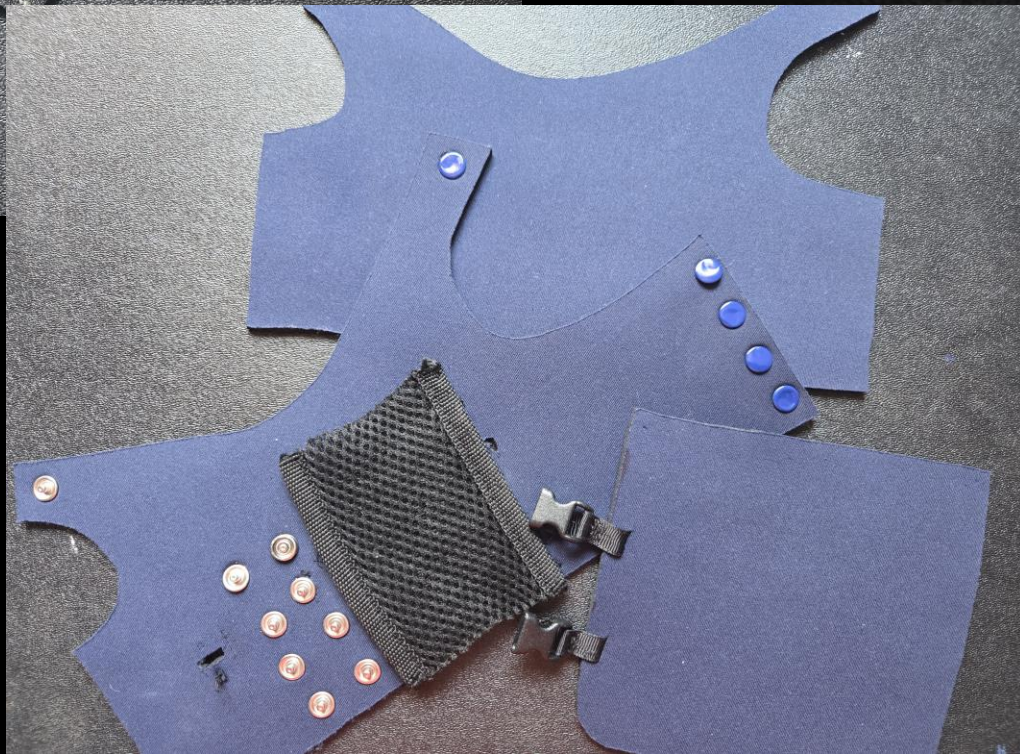
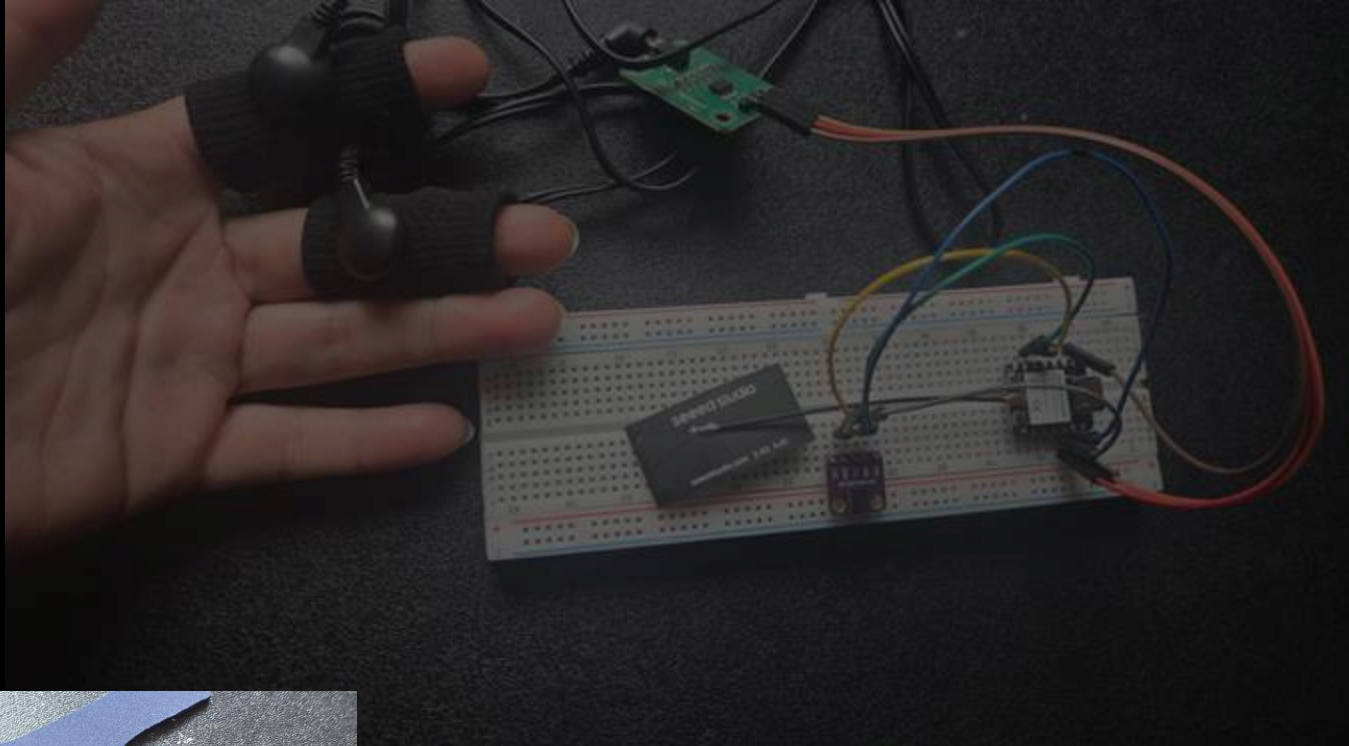
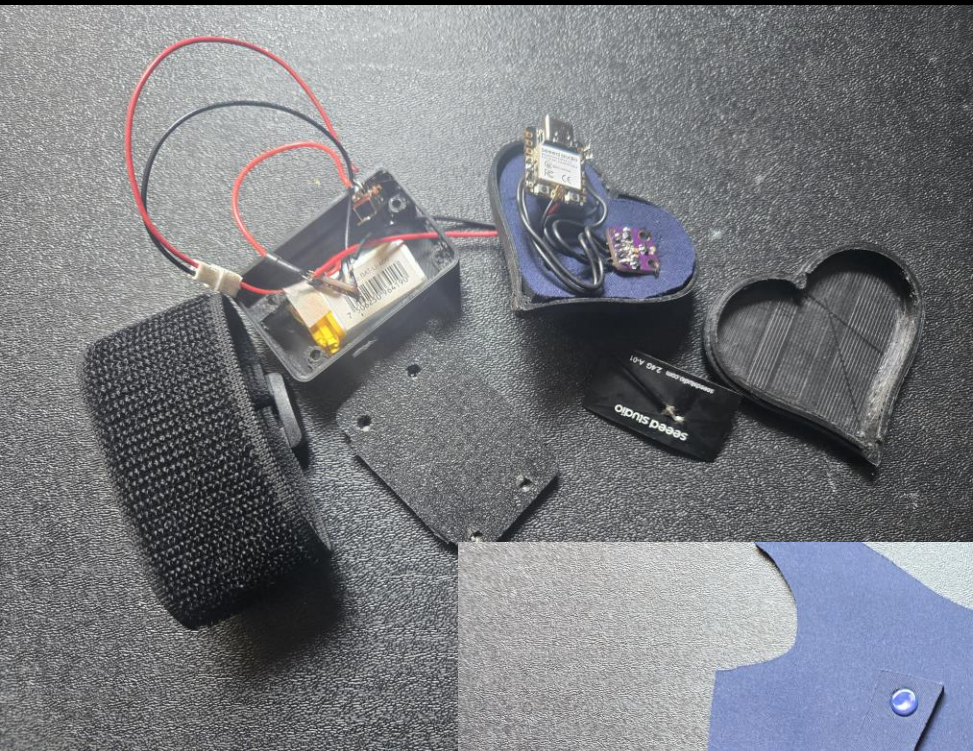
Exhibition

or

Painting Booth

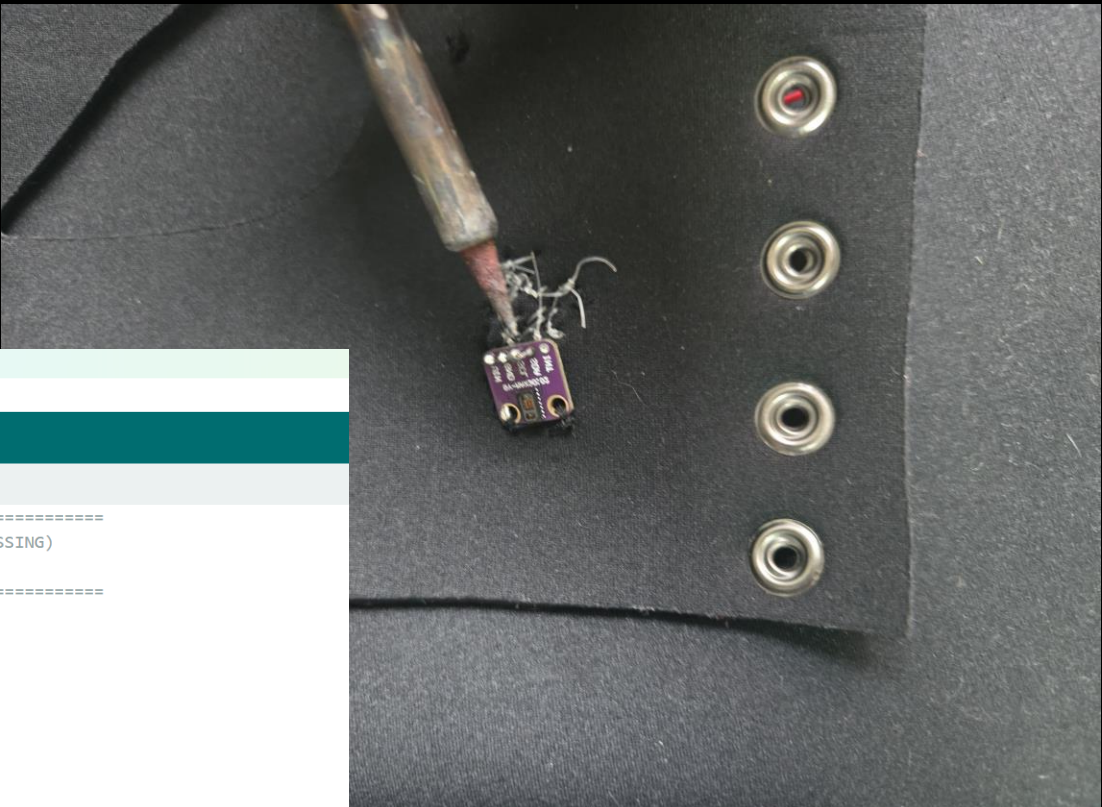


THE PROCESS



THE PROCESS

```
MoodPaint EspNow Animated Voice sketch 260322a
281 // =====
282 // IMAGE GENERATION
283 // =====
284
285 void generateImage() {
286
287   loading = true;
288
289   try {
290
291     println("Generating image for: " + currentEmotion);
292
293     String prompt = buildPrompt(currentEmotion);
294
295     JSONObject body = new JSONObject();
296     body.setString("model", "gpt-image-1");
297     body.setString("prompt", prompt);
298     body.setString("size", "1024x1024");
299
300     URL url = new URL("https://api.openai.com/v1/images");
301     HttpURLConnection conn = (HttpURLConnection) url.openConnection();
302
303     conn.setRequestMethod("POST");
304     conn.setRequestProperty("Content-Type", "application/json");
305     conn.setRequestProperty("Authorization", "Bearer " + API_KEY);
306     conn.setDoOutput(true);
307
```



```
ESPNow_Receiver_sketch_mar18b | Arduino IDE 2.3.7
File Edit Sketch Tools Help
XIAO_ESP32C3
ESPNow_Receiver_sketch_mar18b.ino
1 // =====
2 // ESP32 RECEIVER (ESP-NOW -> SERIAL FOR PROCESSING)
3 // ESP32-C3 COMPATIBLE VERSION
4 // =====
5
6 #include <WiFi.h>
7 #include <esp_now.h>
8
9 unsigned long lastSend = 0;
10 const int SEND_INTERVAL = 40; // ~25 FPS
11
12
13 // ===== DATA STRUCT =====
14 typedef struct {
15   int bpm;
16   int gsrRaw;
17   float gsrNorm;
18   char emotion[16];
19   int touch;
20 } SensorData;
21
```

Output Serial Monitor x

```
Message (Enter to send message to 'XIAO_ESP32C3' on 'COM8')
-----
TOUCH:1
BPM: 74, GSR_RAW: 3210, GSR_NORM: 1.000, STATE: INTENSE
TOUCH:1
BPM: 74, GSR_RAW: 3225, GSR_NORM: 1.000, STATE: INTENSE
TOUCH:1
BPM: 74, GSR_RAW: 3226, GSR_NORM: 1.000, STATE: INTENSE
TOUCH:1
```

THE SYSTEM





HOW DOES IT WORK?

Through programming, your data is transformed into images—each one representing an emotional state:

- Calm
- Stable
- Focused
- Elevated
- Intense

EMOTIONAL STATE MODEL

Emotion	Visual Behavior	BPM Range
CALM	Soft colors, slow movement	BPM < 60
STABLE	Balanced tones, steady motion	$60 \leq \text{BPM} < 80$
FOCUSED	Sharp, structured visuals	$80 \leq \text{BPM} < 95$
ELEVATED	Warm colors, energetic motion	$95 \leq \text{BPM} \leq 110$
INTENSE	High distortion, fast motion	BPM > 110

- BPM (Beats Per Minute)

HOW DOES IT WORK ?

Live Painting

A digital painting begins to move and evolve.

It is not pre-recorded, not AI generated.

It is generated in real time from your body

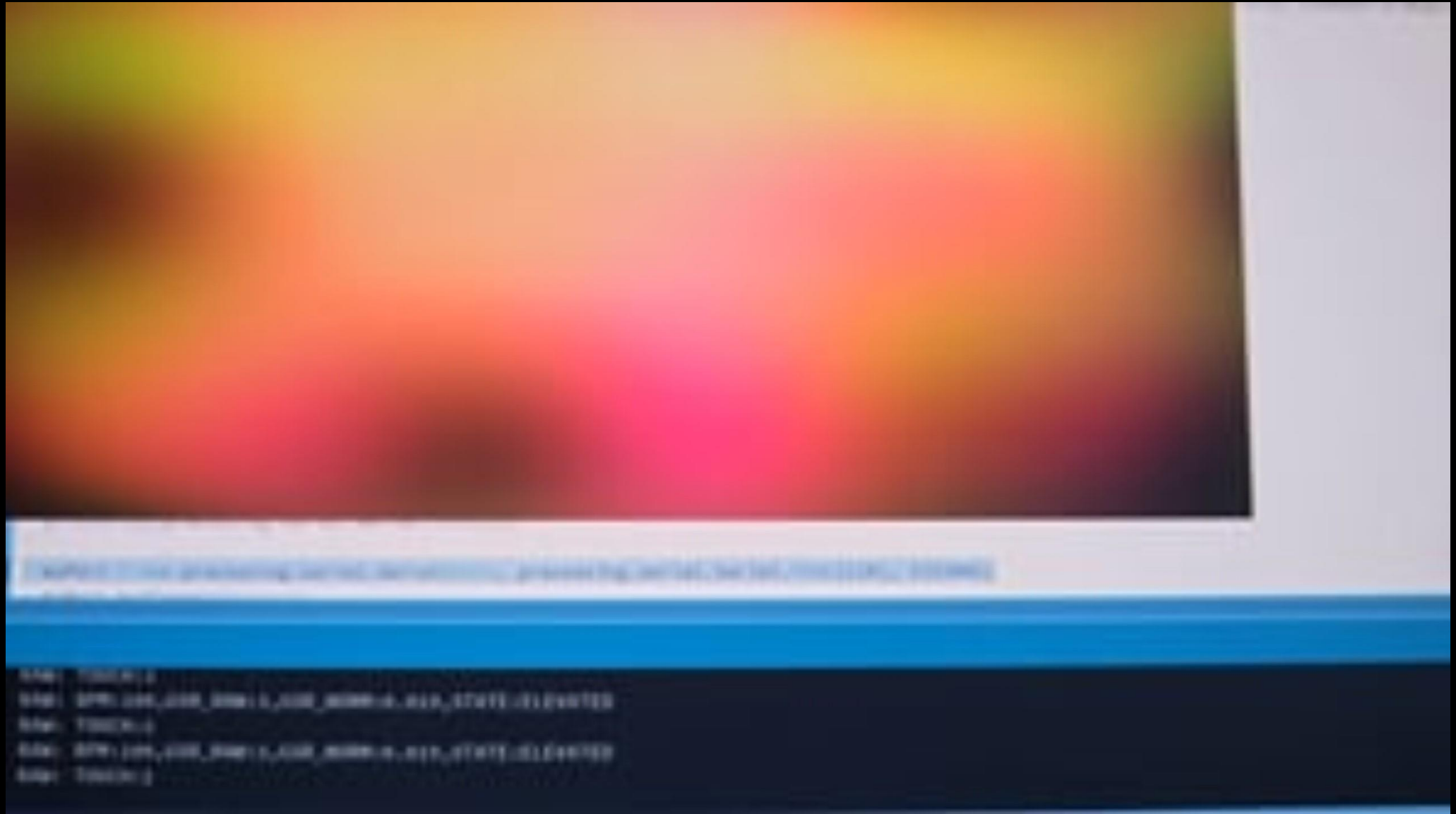
Faster heartbeat → more movement

Higher tension → more distortion

Emotion → color and behavior

HOW DOES IT WORK ?

Live Painting



BIO-RESPONSIVE EMOTIONAL PORTRAIT

Date: 2026-03-02 17:10

Duration: 60 seconds

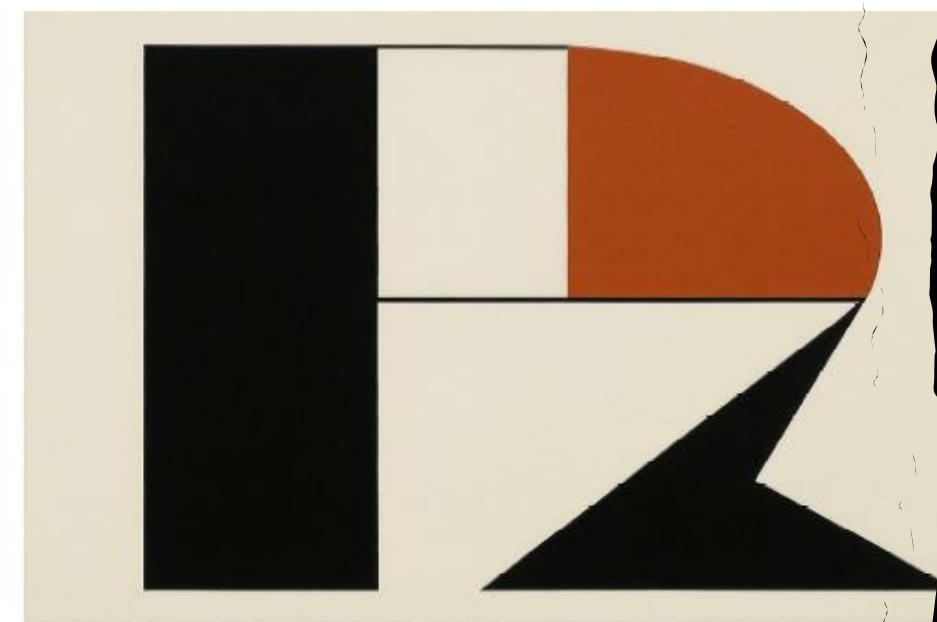
At the moment of contact,
and your body began to translate itself.

For 60 seconds,
your internal rhythms surfaced into light.

A subtle current ran beneath the surface of your skin.

What emerged was not your likeness,
but the trace of your internal weather.

A fragment of you, translated into light.



OUTCOME

Transformation

Your data is then translated into:

- A unique AI-generated artwork (still images)
- A poetic reflection of your physiological moment
- A voice narration (Text-to-Speech)
- A printed report

Output

You receive:

- A visual portrait
A poetic document
A spoken reflection

THE MEANING

- The intangible becomes tangible.
- A moment of reflection to be truly present
- Inviting you to look inward



A close-up photograph of a person's hand wearing a blue and black glove. The glove has a grey, textured sensor patch on the back of the hand near the wrist. The background is dark.

THANK YOU

Disclaimer:
**The biometric data is not saved or stored
by the system.**

Emma Yañez



ACKNOWLEDGEMENT & CREDITS

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My family & friends

Mixkit copyright free sound effects:
heartbeat, airport, and printer sounds.

