

"Creating is an innate part of human nature"

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*A selection of personal and professional projects*

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AMAY KATARIA

2023

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"The infamously hidden knowledge is called intuition"

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# CHAO!

My name is Amay Kataria and I like to create new forms of media interventions that fuse warmth, empathy, and communal interaction with network technologies. In the past 11 years, I have worked as a software engineer at Microsoft, developing communication systems for Skype, as well as an independent new-media artist, creating interactive experiences that tell personal stories by remediating industrial technologies.

To demonstrate my unique blend of engineering expertise with creative expression, I have carefully curated three projects for this portfolio that lie at the intersection of physical and digital materialities, and how these two worlds often superimpose in my works.

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# SUPERSYNTHESIS

2022

*Personal*

24 LED lights, raspberry pi, vinyl, 3x8 relay channels, 3D printed blocks, 100 ft electrical cables, speakers, custom software



## ABOUT

Supersynthesis is an interactive audio-visual installation that utilizes the medium of light and sound to craft a communal experience.

## ROLE

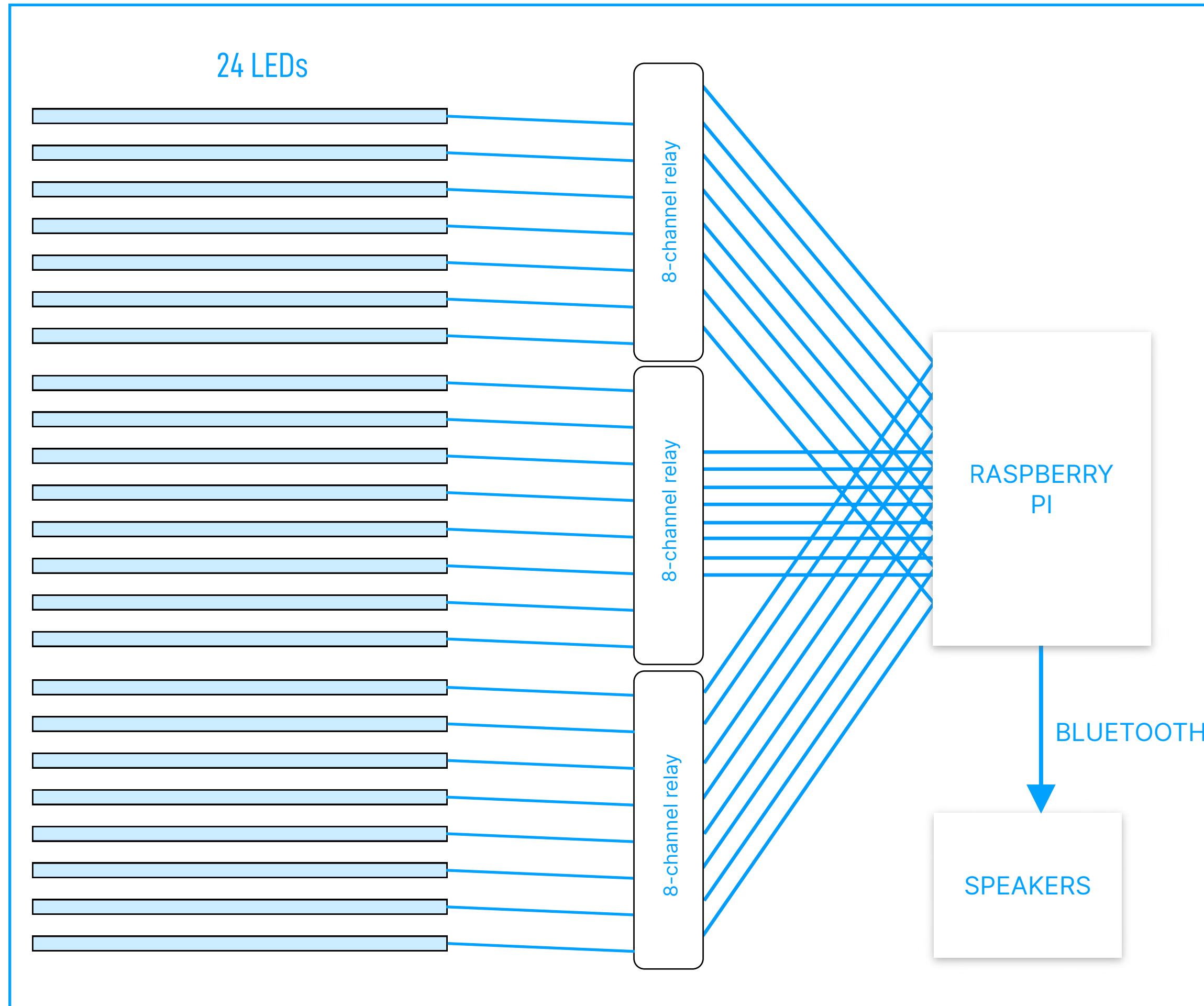
concept, parametric architecture, fabrication, web design, frontend, backend, hardware, engineering

## KEYWORDS

#waves #sound #light #publicart #performance #instrument  
#reactjs #p5js #python #socketio #nodejs #heroku #puredata  
#raspberrypi

## COMMUNAL COMPUTING

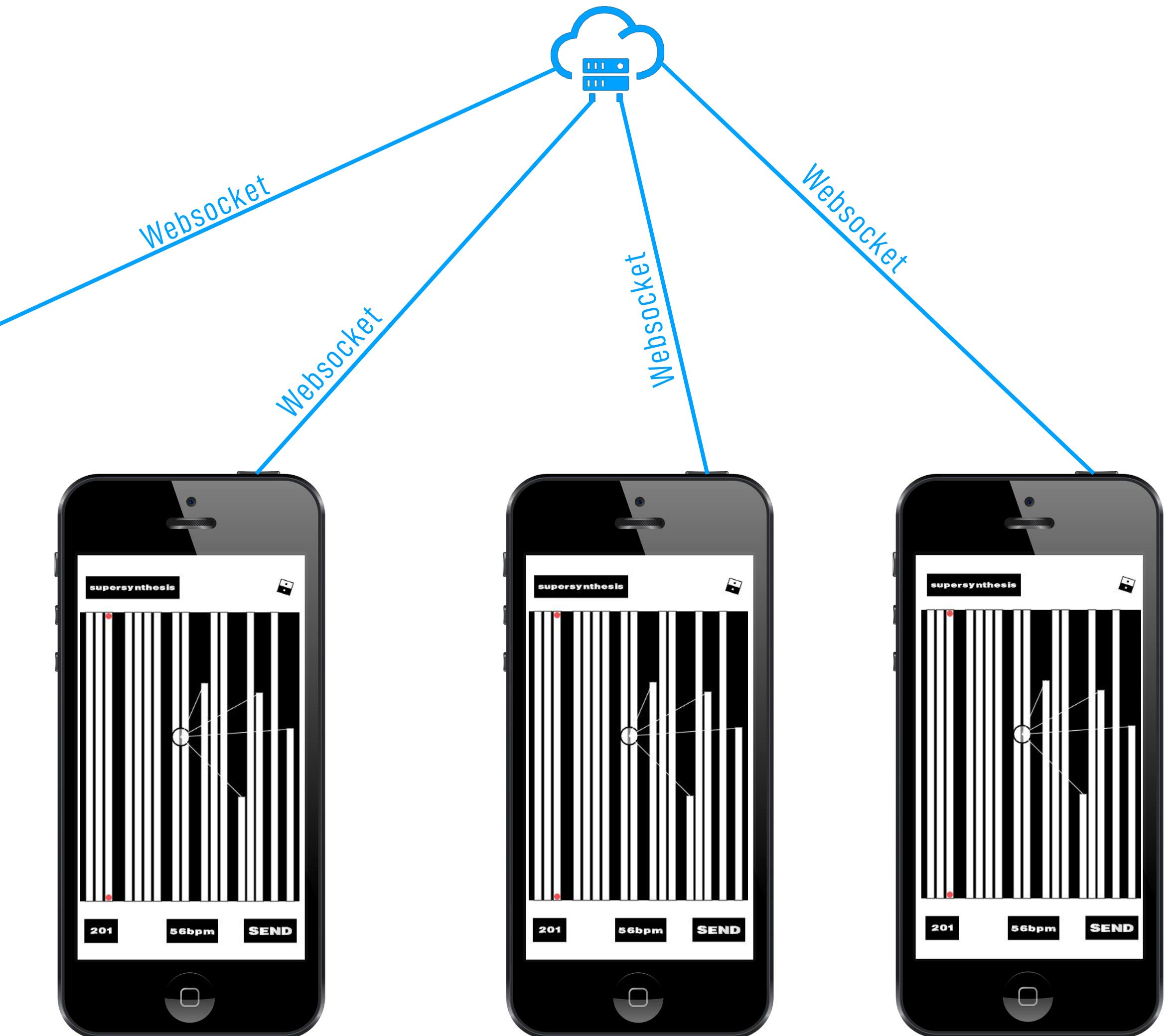
The network architecture runs a master sequencer in the cloud that coordinates communication between multiple clients that connect with it.



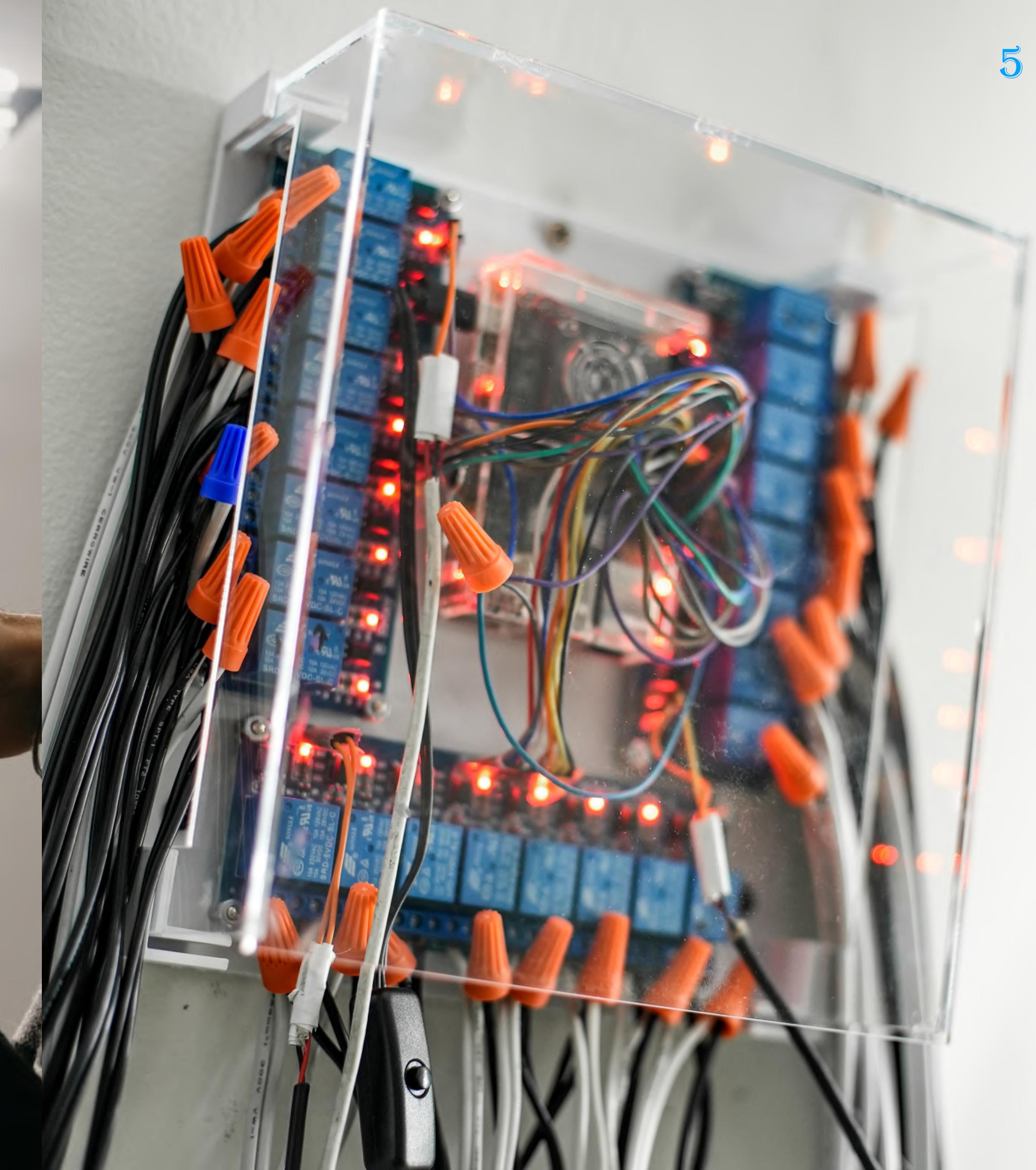
**PHYSICAL INSTALLATION**

## SEQUENCER IN THE CLOUD

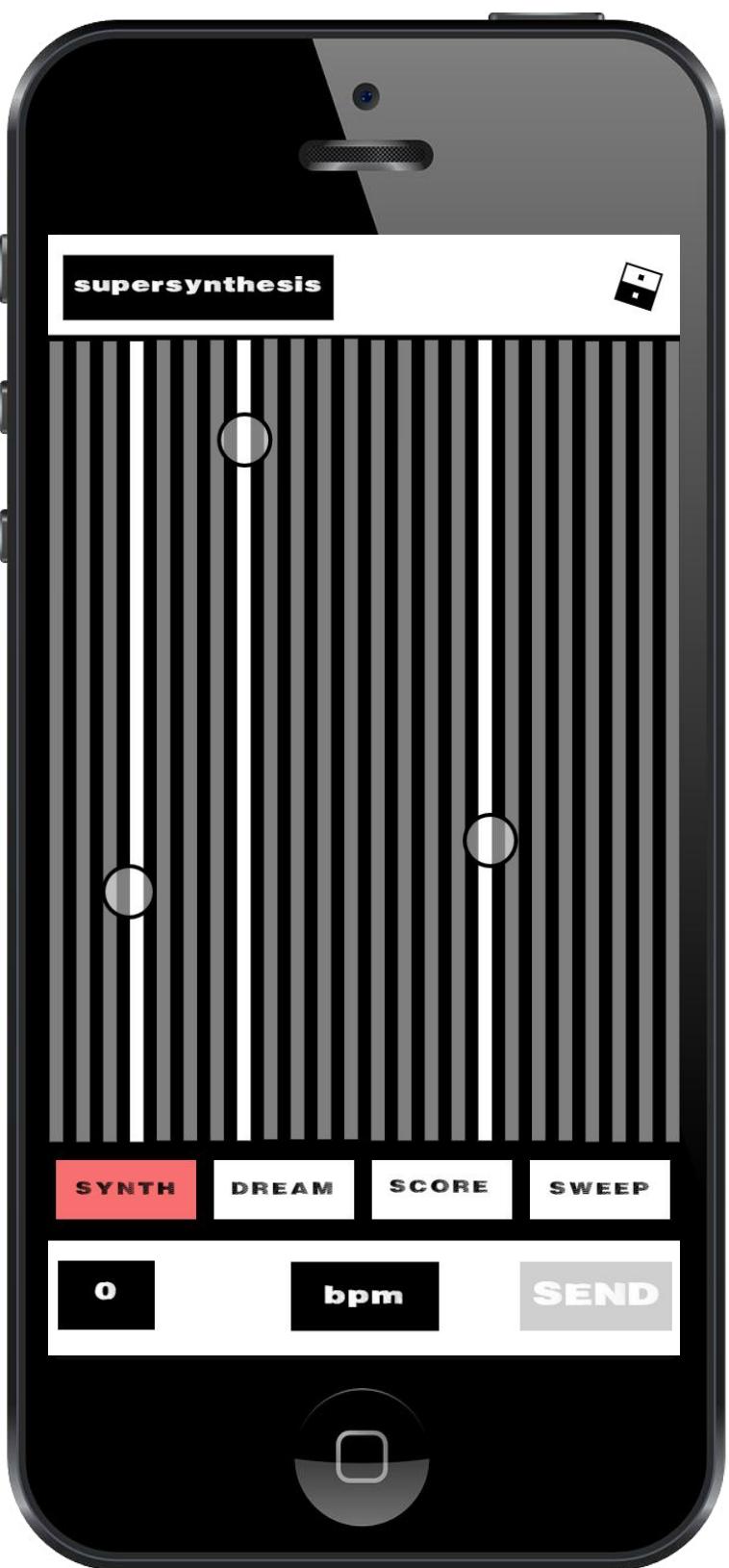
Database stores user generated templates



<https://supersynthesis.art>

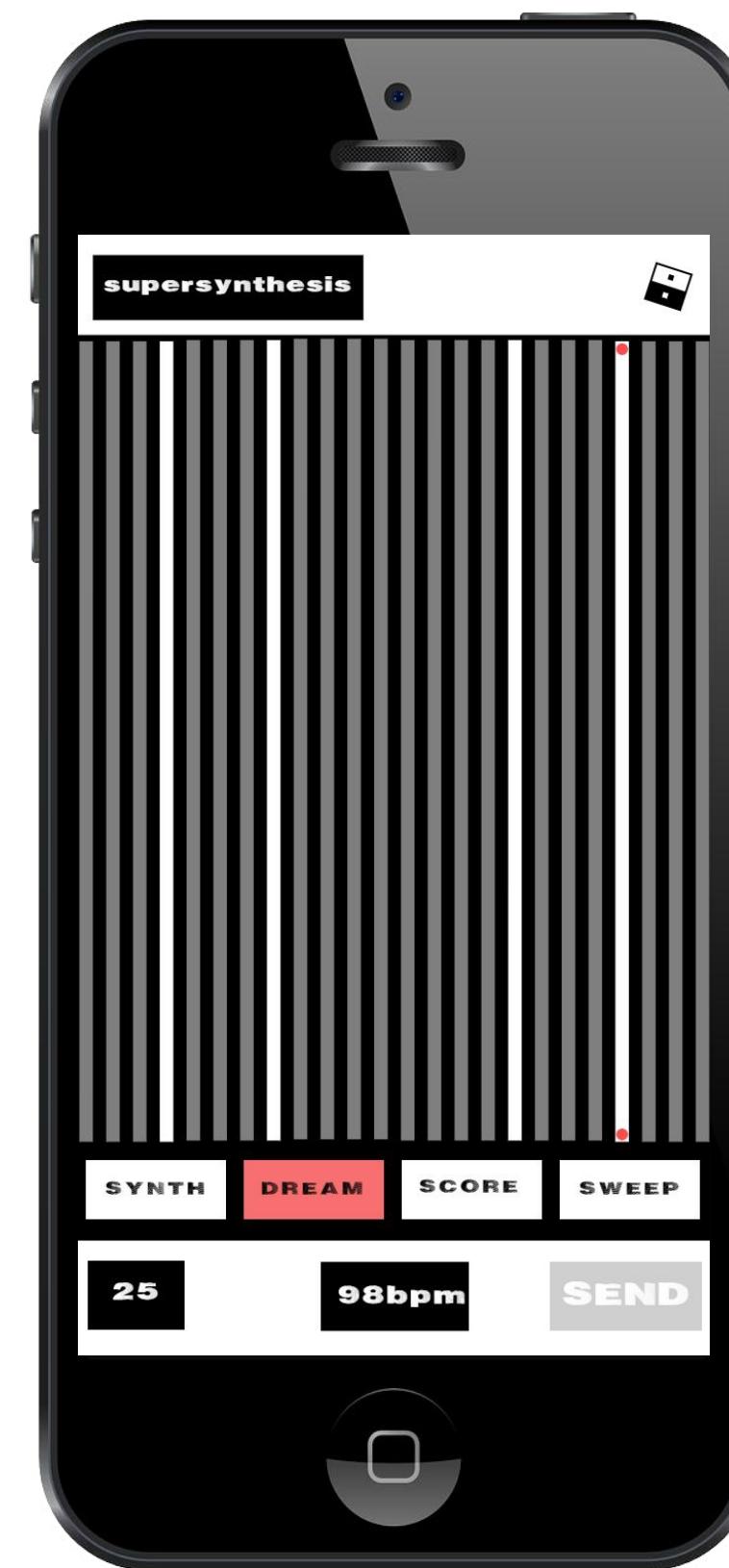


## USER INTERACTION MODES



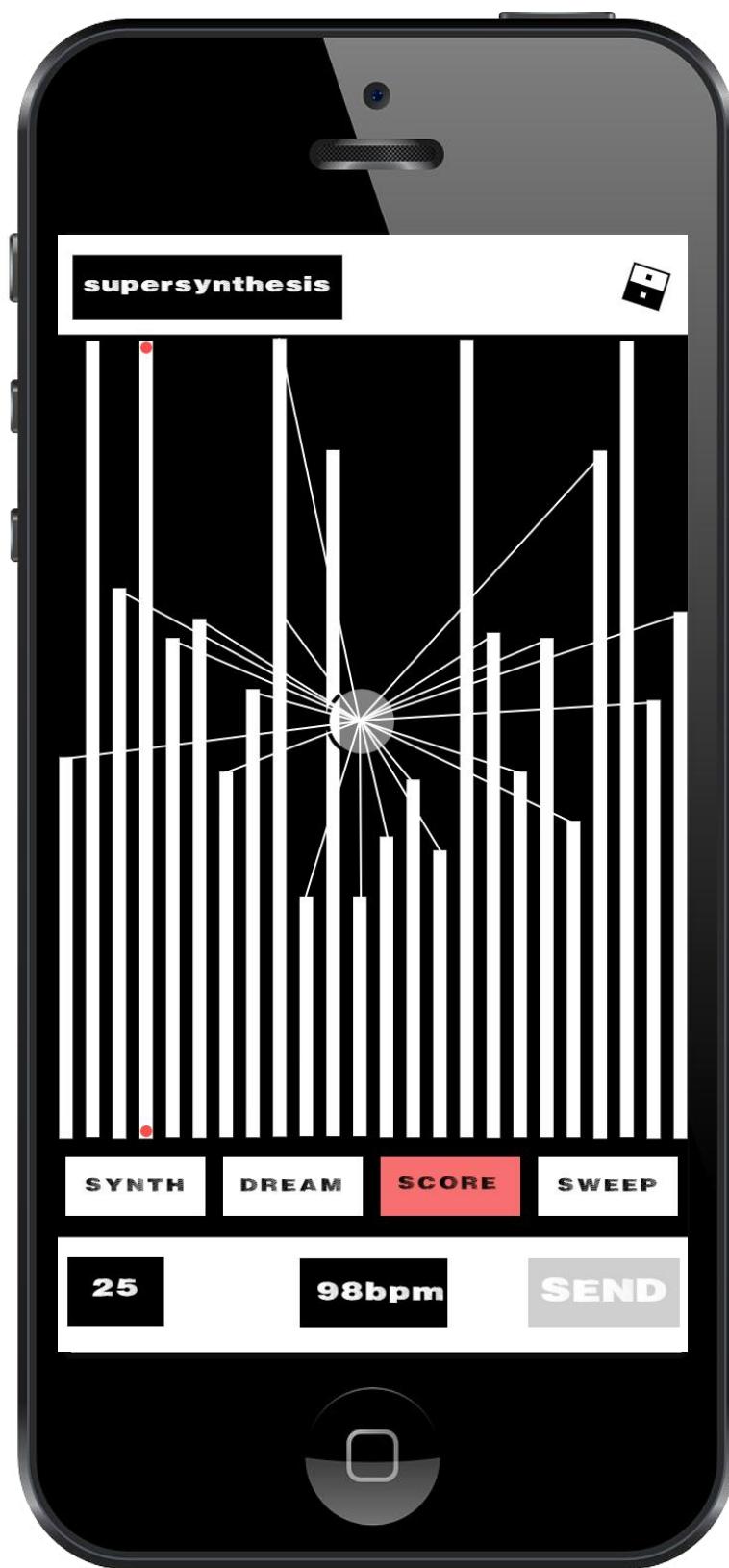
### SYNTH

Multitouch interaction like a synthesizer, with multiple clients



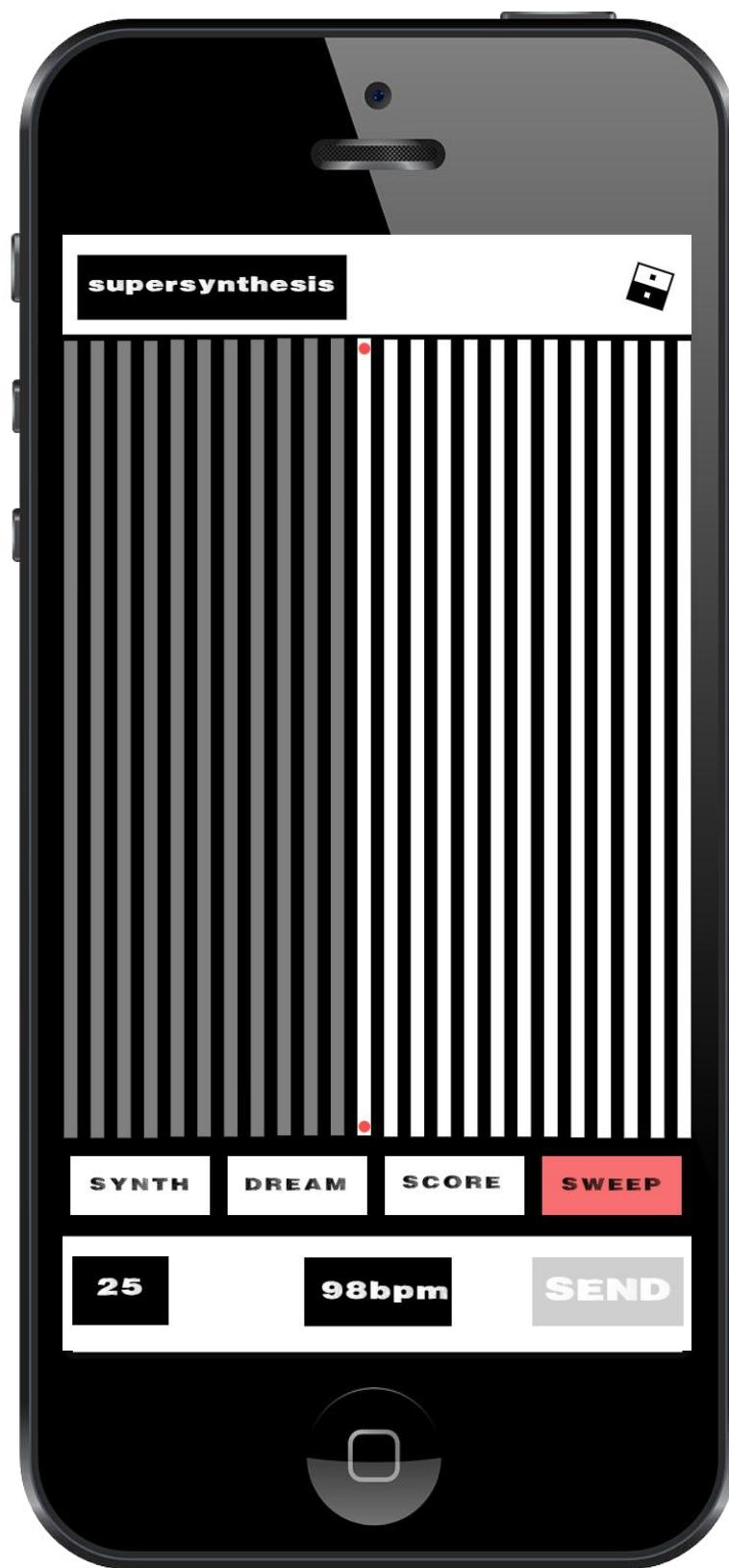
### DREAM

Randomly sequence previous scores created by others, stored in the database



### SCORE

Create a new custom score and store it in the database



### SWEEP

Run hardcoded scores sequenced randomly between each other



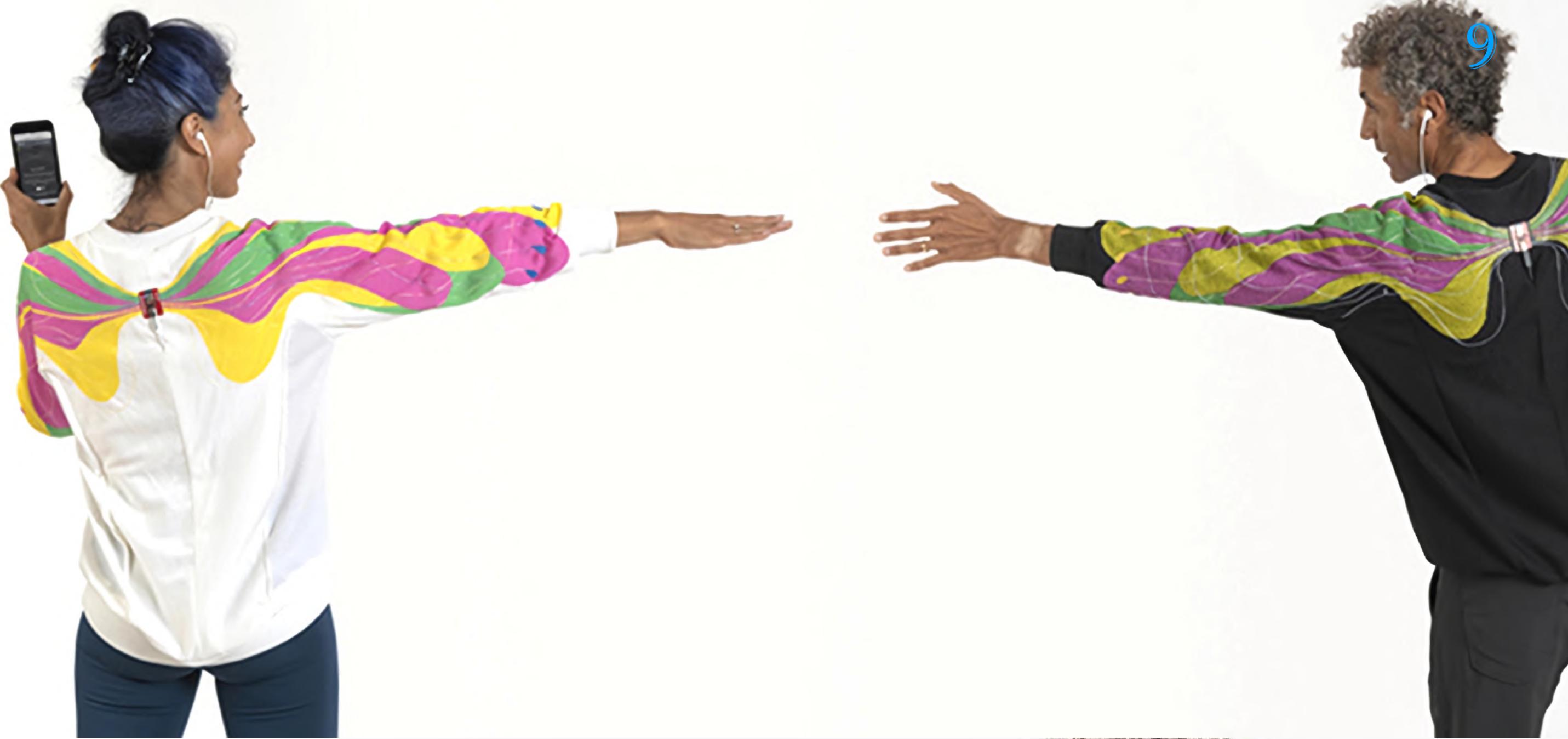


## EMBROIDERED TOUCH

2021

client: Anke Loh (Fashion Technologist)

custom bonded garment, heat sensitive thread, touch sensors, arduino, custom software



## ABOUT

Embroidered Touch is a hardware-software engineering commission to create a communication system between textiles bonded with cutting edge sensor technology.

## ROLE

arduino software, bluetooth communication, frontend, backend, software architecture

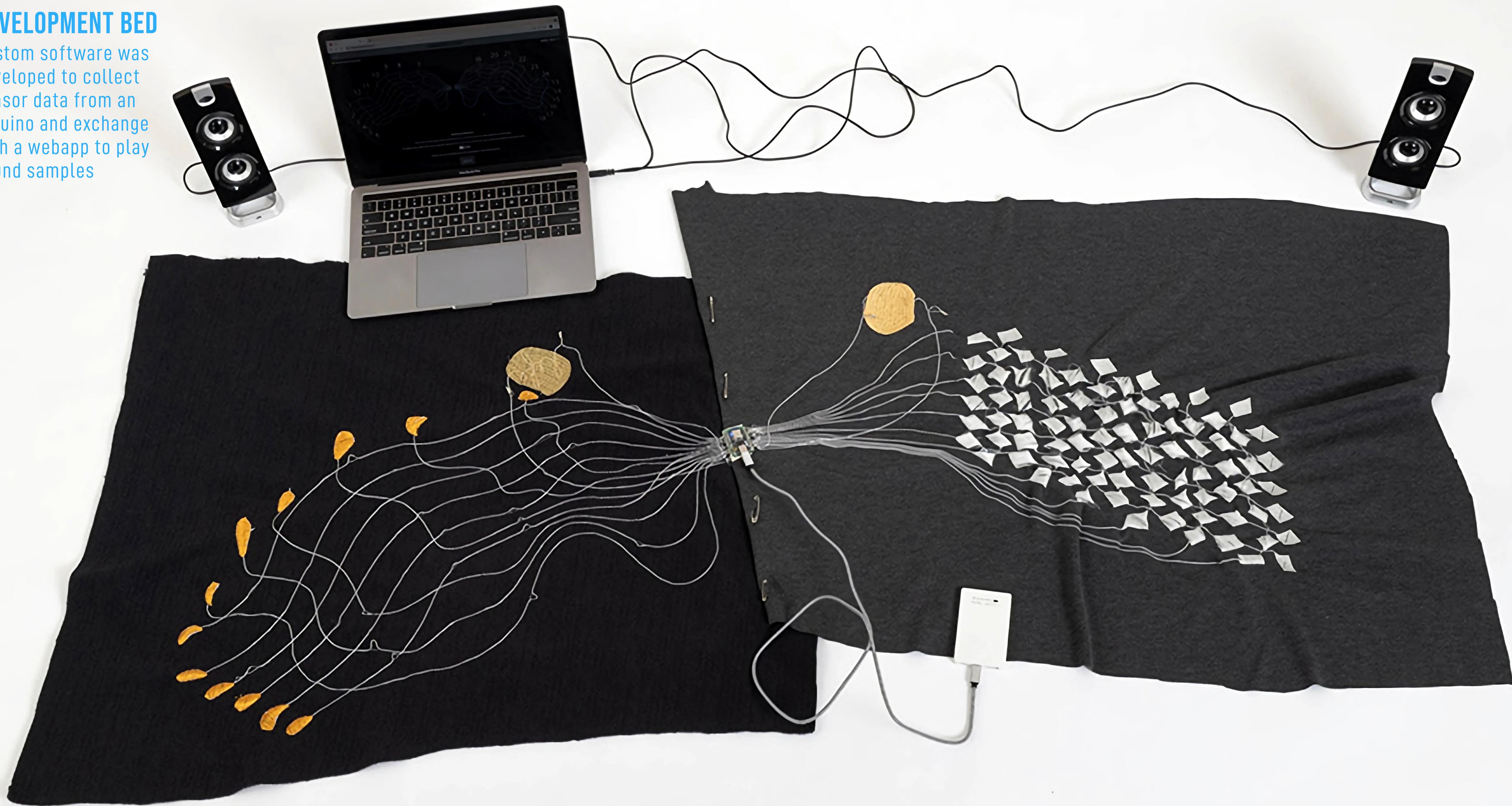
## KEYWORDS

#fashion #touch #communication #connection #iot #fullstack  
#reactjs #nodejs #heroku #arduino #bluetooth #sensors #sound

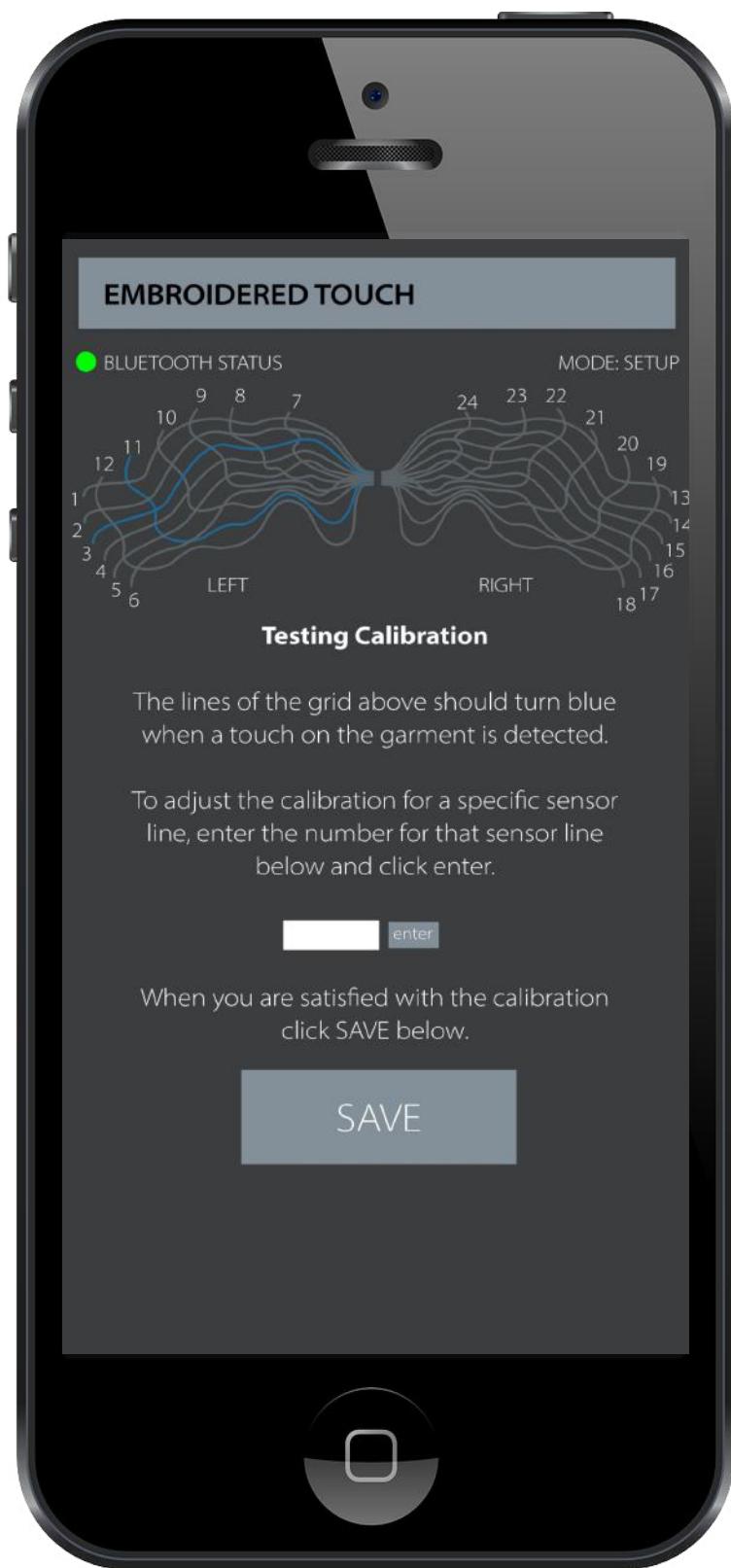


## DEVELOPMENT BED

Custom software was developed to collect sensor data from an arduino and exchange with a webapp to play sound samples

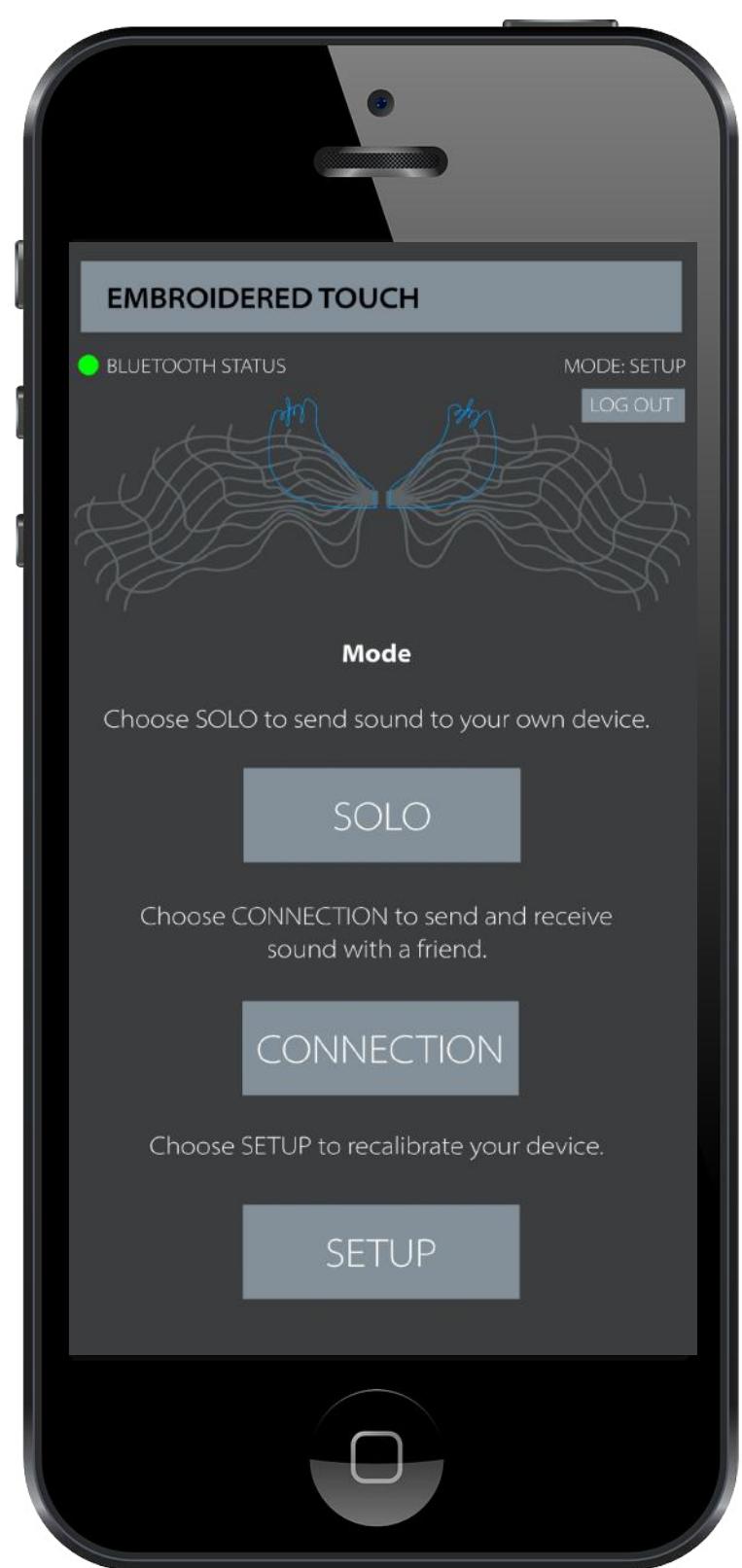


# USER INTERACTION



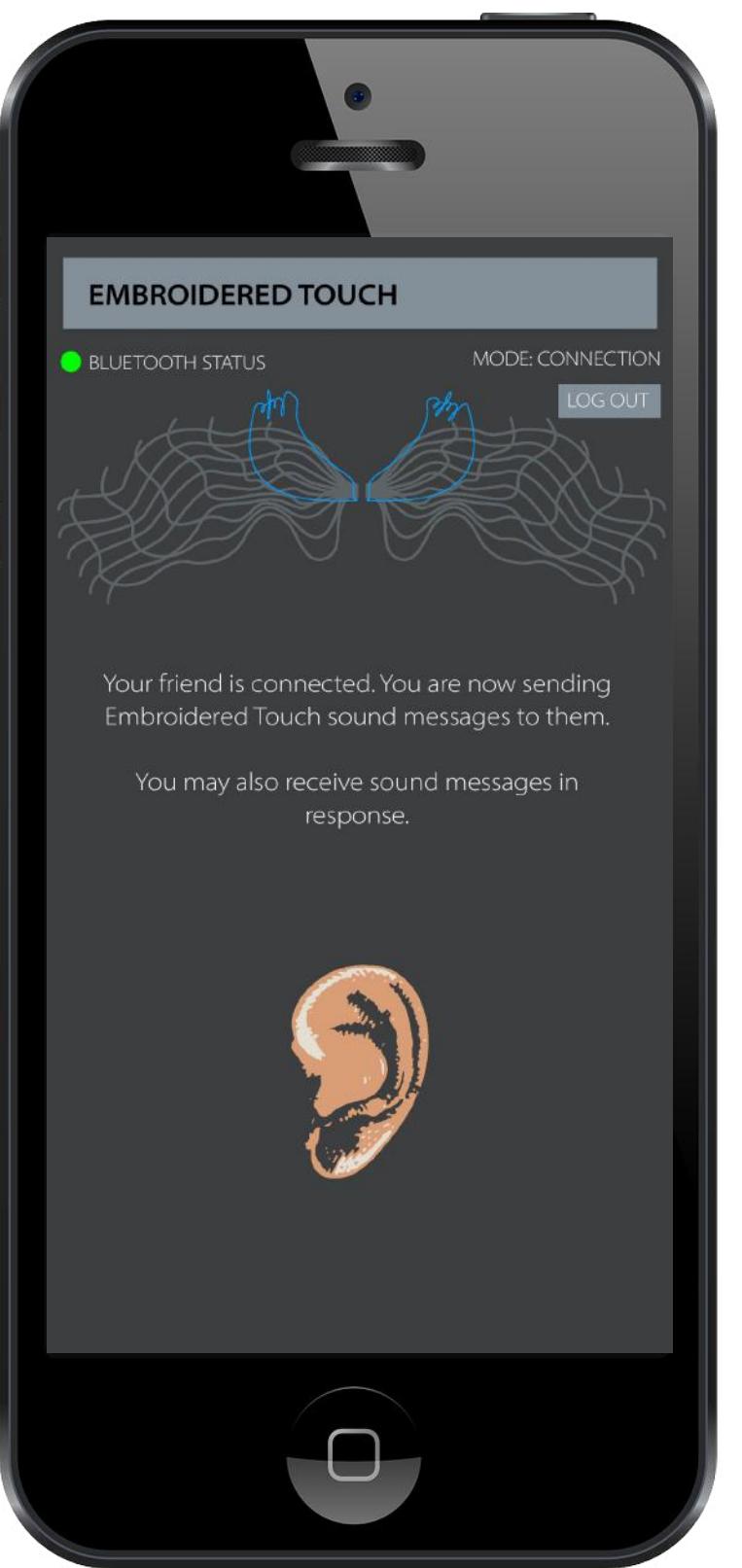
## CALIBRATION

Interactively calibrate touch sensors on the garment



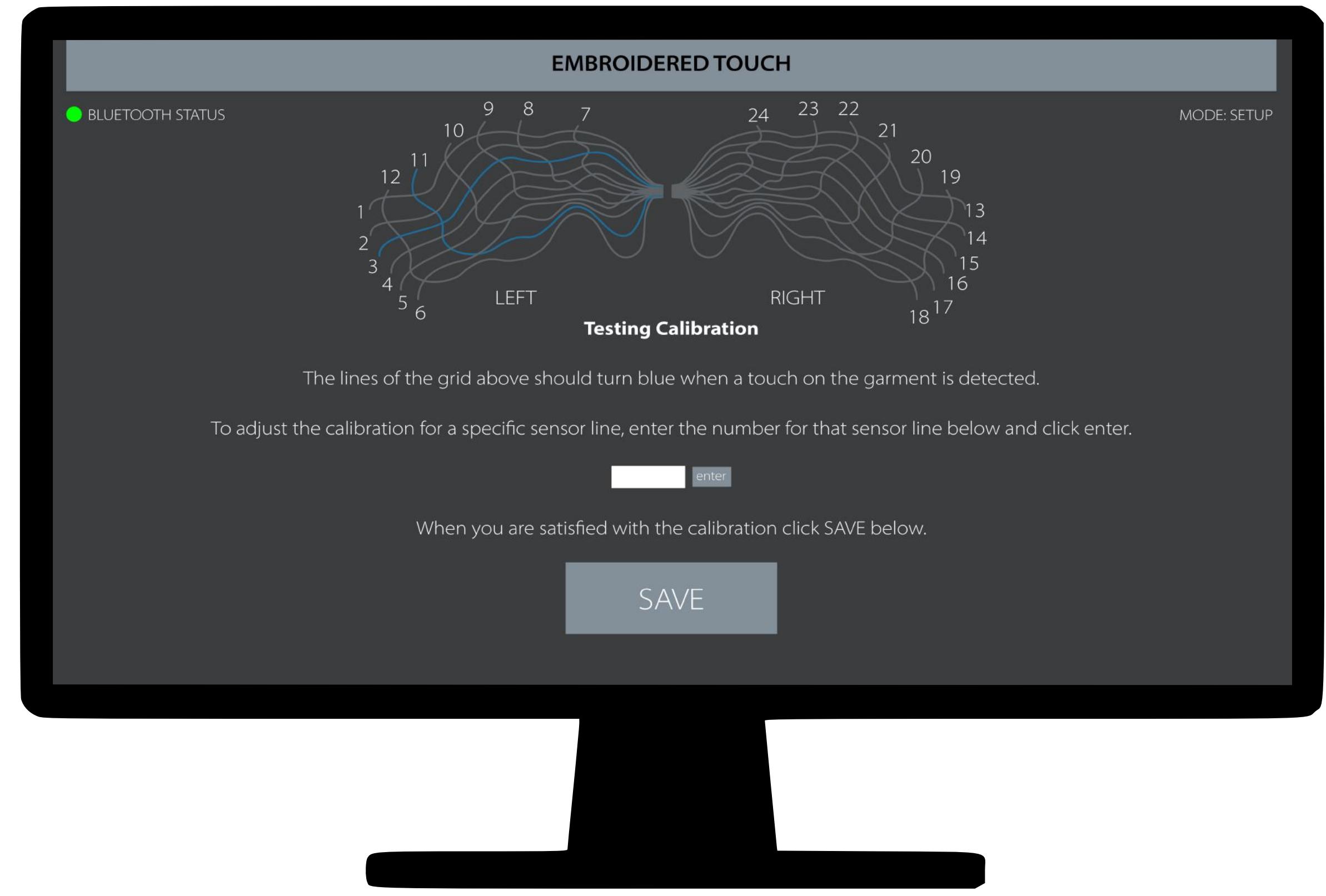
## MODES

Modes activate different user experiences



## CONNECTION

Connect with another friend and send them sound



## CALIBRATION

Responsive experience for multiple devices like desktop, tablet, and mobile





# MOMIMSAFE

2020

Personal

raspberry pi, webcam, thermal printer, thermal paper, custom software



<https://momimsafe.live>

## ABOUT

Momimsafe.live is an interactive website that ran as an active live-stream of my home studio in Chicago from April to August, 2020, to stay connected with my loved ones during the Coronavirus pandemic.

## ROLE

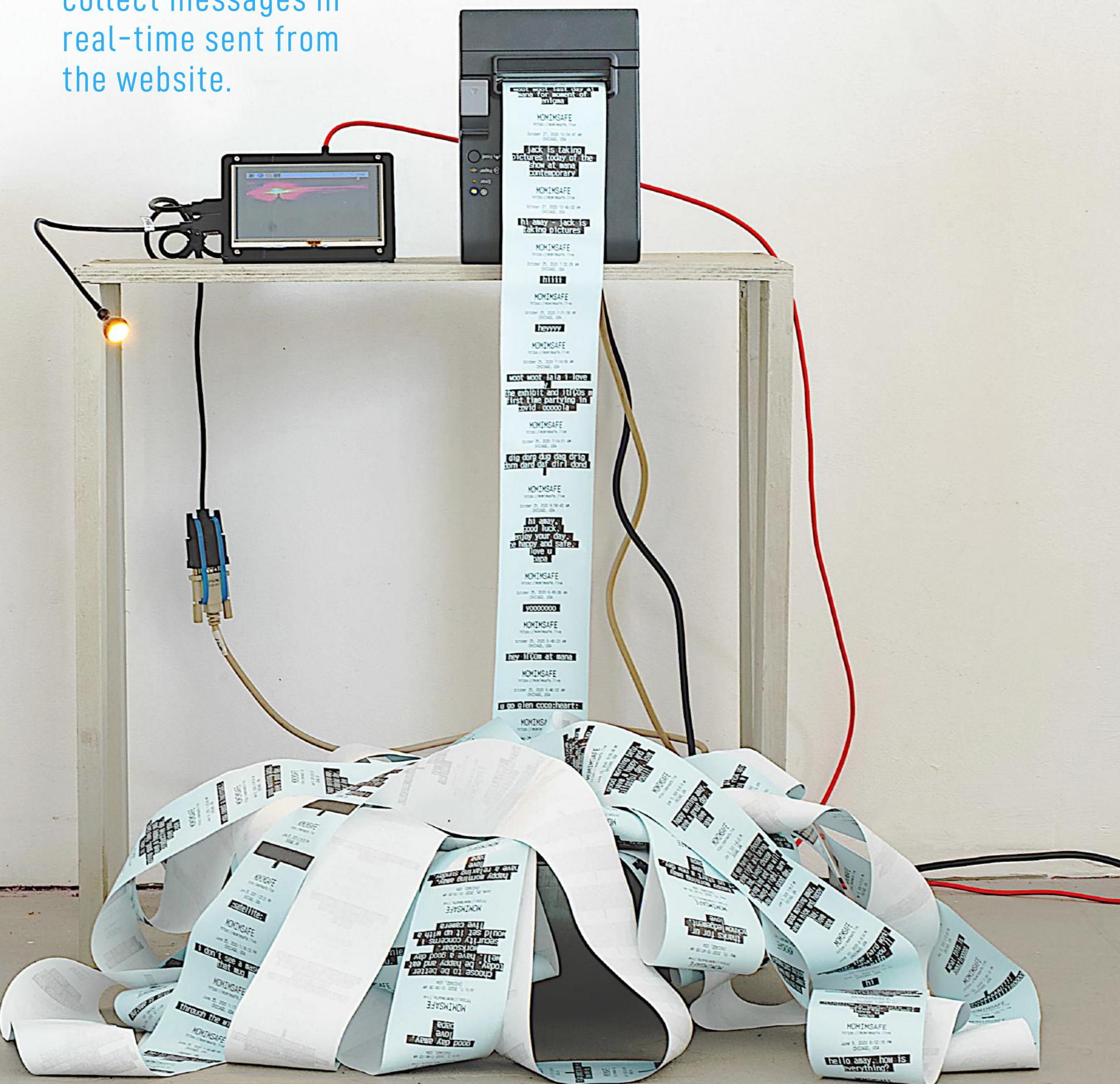
concept, web design, frontend, backend, software architecture, hardware hacking, installation

## KEYWORDS

#telepresence #intimacy #pandemic #diy #installation  
#raspberrypi #fullstack #reactjs #nodejs #heroku #interactive

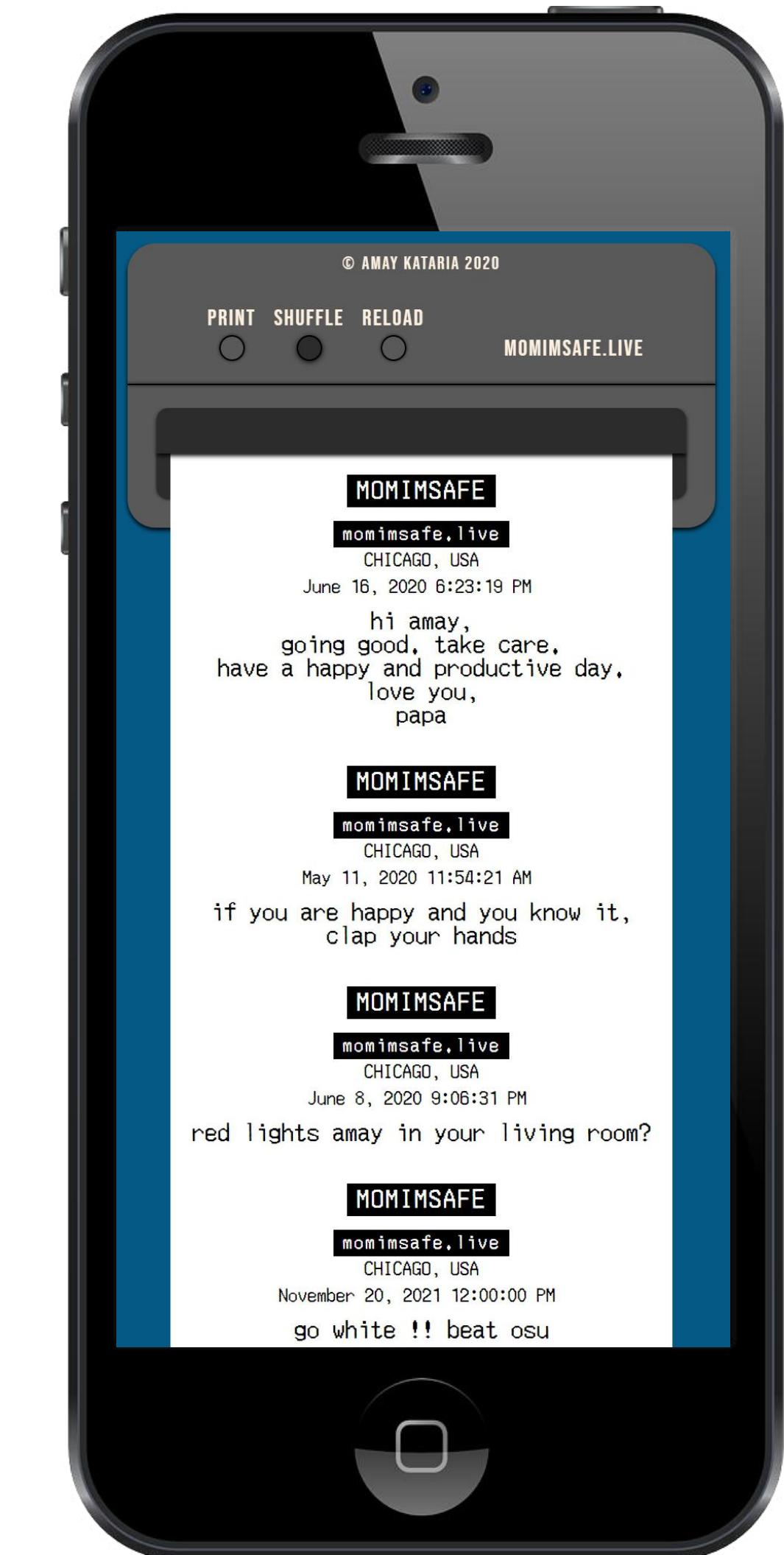
## PHYSICAL PRINTER

A thermal printer was hacked and setup in my studio to anonymously collect messages in real-time sent from the website.



## VIRTUAL PRINTER

Over 2000 messages have been received till now. A virtual printer lets one interact with all of these messages.



<https://momimsafe.live/#/printer>

and sage day.  
lots of love  
papa

16

MOMIMSAFE

<https://momimsafe.live>  
CHICAGO, USA  
May 19, 2020 10:21:56 AM

my son is my baby  
today, tomorrow and  
always.

MOMIMSAFE

<https://momimsafe.live>  
CHICAGO, USA  
May 19, 2020 3:34:57 PM

upar dekh

MOMIMSAFE

<https://momimsafe.live>  
CHICAGO, USA  
May 19, 2020 3:52:02 PM

hero! kidhar hai?

MOMIMSAFE

<https://momimsafe.live>  
CHICAGO, USA  
May 19, 2020 9:40:45 PM

good evening love  
papa

MOMIMSAFE

<https://momimsafe.live>  
CHICAGO, USA  
May 19, 2020 9:55:12 PM

he believed he could,  
so he did. every day  
you are getting closer  
to your goal.mom loves  
you.

MOM

<https://momimsafe.live>  
CHICAGO, USA  
April 25,

good mornin  
son. sure  
good

April 27, 2020  
love the fairy 1

MOMIMSAF

<https://momimsafe.live>  
CHICAGO, USA  
May 1, 2020 8:26:

good morni  
betu..started

<https://momimsafe.live>  
CHICAGO, USA  
April 24, 2020 9:49:43 PM

morning baby- mc

**IMSAFE**

<https://momimsafe.live>  
CHICAGO, USA  
May 7, 2020 9:54:48 PM

of graduation.

**IMSAFE**

<https://momimsafe.live>  
CHICAGO, USA  
May 14, 2020 10:09:24 AM

ed morning bro.

MOMIMSAFE

<https://momimsafe.live>  
CHICAGO, USA  
May 10, 2020 7:34:42 AM

i adore his smile, i  
cherish his hugs, i  
admire his heart, but  
above all, i love that  
he is my son. with tons  
of love :heart: :heart:  
mom

MOMIMSAFE

<https://momimsafe.live>  
CHICAGO, USA  
May 10, 2020 10:47:05 AM

happy morning amay  
let us start a new day.  
love  
papa

MOMIMSAFE

<https://momimsafe.live>  
CHICAGO, USA  
May 10, 2020 10:47:58 AM

thanks for ur  
acknowledgement.  
love

MOMIMSAFE

<https://momimsafe.live>  
CHICAGO, USA  
May 10, 2020 10:47:58 AM

thanks for your  
acknowledgement. love

MOMIMSAFE

<https://momimsafe.live>  
CHICAGO, USA  
May 10, 2020 2:36:26 PM

happy morning amay,  
good luck for the day.  
stay safe, stay  
healthy.  
love you,  
papa

MOMIMSAFE

<https://momimsafe.live>  
CHICAGO, USA  
June 2, 2020 11:30:34 AM

do the harlem shake

MOMIMSAFE

<https://momimsafe.live>  
CHICAGO, USA  
June 2, 2020 1:34:04 PM

it's happening bro!

MOMIMSAFE

<https://momimsafe.live>  
CHICAGO, USA  
June 2, 2020 8:41:30 PM

you are amazing,  
you are important,  
you are special,  
you are unique,  
you are kind,  
you are precious,  
you are loved.  
good evening.

MOMIMSAFE

<https://momimsafe.live>  
CHICAGO, USA  
June 3, 2020 10:32:33 AM

a little progress each  
day adds up to big

MOMIMSAFE

<https://momimsafe.live>  
CHICAGO, USA  
April 23, 2020 10:54:17 PM

setup is quite  
ting!! love, a

MOMIMSAF

<https://momimsafe.live>  
CHICAGO, USA  
April 24, 2020 1

lots of

MOMIMSAFE

<https://momimsafe.live>  
CHICAGO, USA  
April 24, 2020 7:15:37 AM

you amay

AFE

<https://momimsafe.live>  
USA  
7:50:31 PM

wanking

MOMIMSAF

<https://momimsafe.live>  
CHICAGO, USA  
May 7, 2020 9:51:01 PM

hi guj

IMSAFE

<https://momimsafe.live>  
CHICAGO, USA  
May 10, 2020 3:25:52 PM

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MOMIMSAFE

<https://momimsafe.live>  
CHICAGO, USA  
May 15, 2020 5:58:08 PM

hehe  
very sweet  
<3  
rh

MOMIMSAFE

<https://momimsafe.live>  
CHICAGO, USA  
May 15, 2020 6:33:18 PM

is there any way you  
know who's watching?

MOMIMSAFE

<https://momimsafe.live>  
CHICAGO, USA  
May 15, 2020 6:34:39 PM

gotya thanks! i feel  
like a creep

MOMIMSAFE

<https://momimsafe.live>  
CHICAGO, USA  
May 15, 2020 6:35:55 PM

lol i read it

MOMIMSAFE

CHICAGO, USA

we are  
t my mo  
so i



## LABOUR OF LOVE [2020]

### INSTALLATION

Collected messages were stored in a virtual database and used as raw material to materialize into art exhibitions.



## ANTIDOTE (2020)



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## GET IN TOUCH

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-  Chicago, IL, USA

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