WORKSHOP/ LA / JULY 2016

The2vvo and Dillon Bastan

www.the2vvo.com
www.facebook.com/the2vvo
https://soundcloud.com/2vvo

http://www.dillonbastan.com
www.facebook.com/dillonbastanartist/
https://soundcloud.com/integratelive

Music

Sound Art

Installations

Visual Art

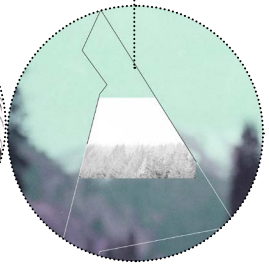
Video

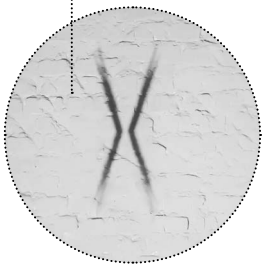
Programming

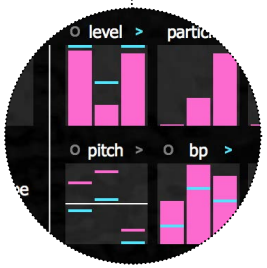
Installations

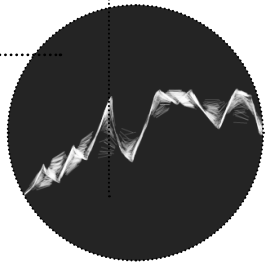
Music

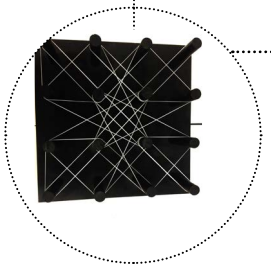
Sound Art











July 30.6-9pm

COMING EVENT:

Sound sculpture VOR ORT/
ON SITE

cecartslink

WORKSHOP STRUCTURE

PART 1

-Few key ideas and few facts from history

PART 2

-Intro to Max, Ableton and Arduino
(Explain what each does, help install)
- Presentation of patches and examples

short break

PART 3

- Live Interactive system building (software + hardware)
- Playtime
- Q/A

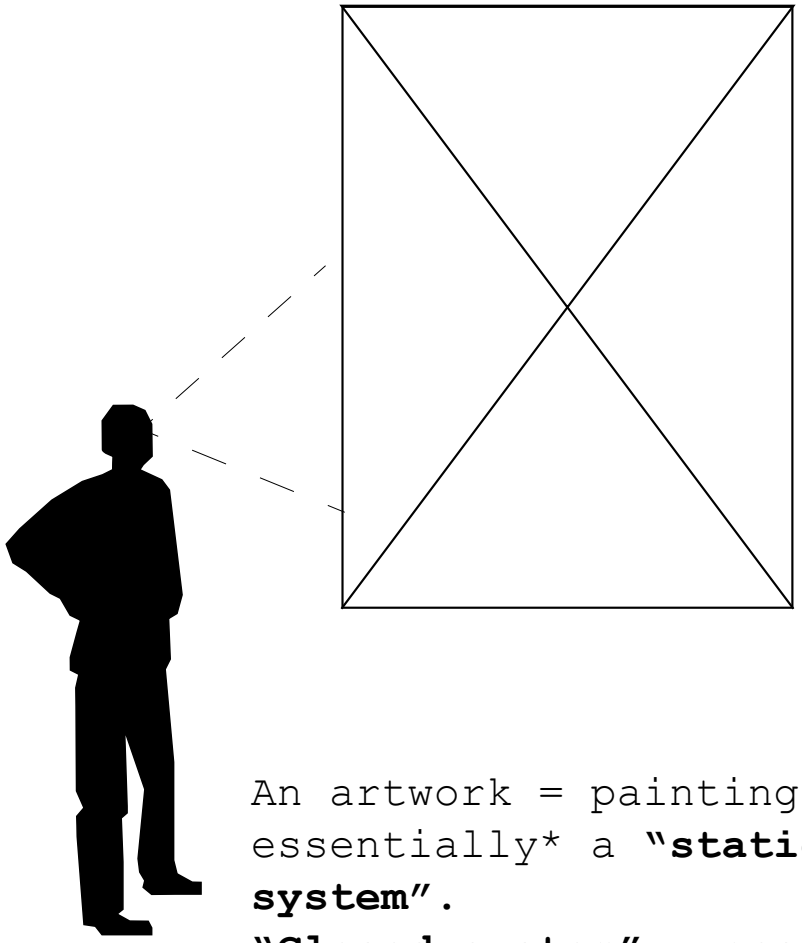
INTERACTIVE ART

INTERACTIVE ART

'Art becomes interactive when **audience participation** becomes integral part of the artwork. Audience behaviour can cause the artwork to change itself".

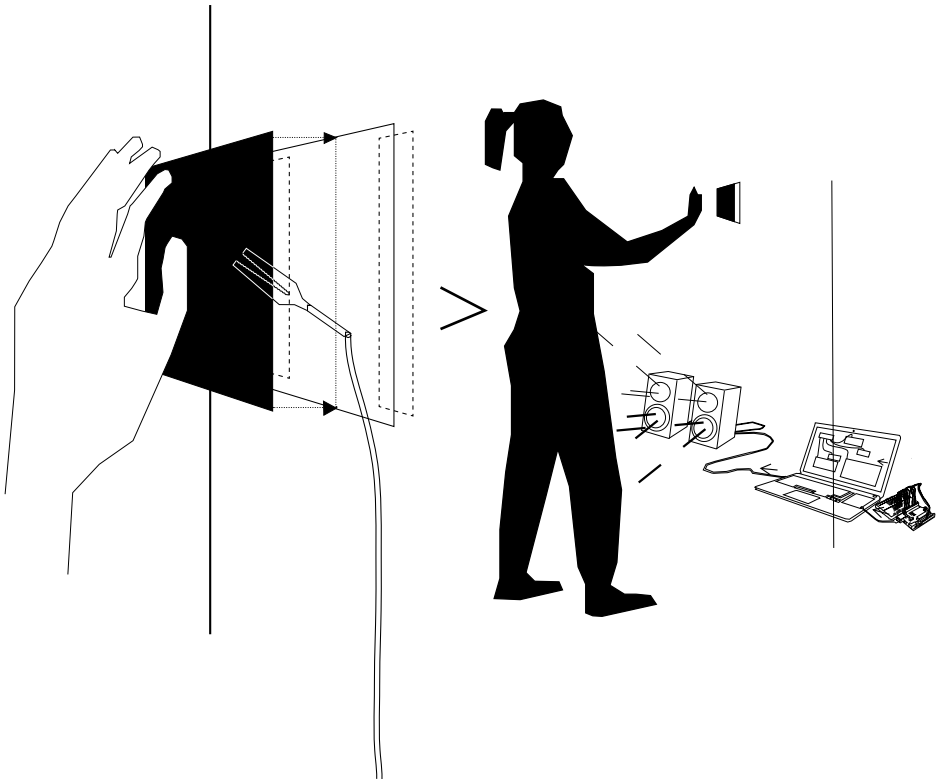
Ernest Edmonds

http://research.it.uts.edu.au/creative/linda/CCSBook/Jan%2021%20web%20pdfs/Edmonds-IArt.pdf



An artwork = painting, is essentially* a **"static system".**
"Closed system" = one that is not subject to any external influence.

*"essentially" because, of course, the nature of light that falls on a painting, the colour of the wall on which it is hung, etc., certainly change how it looks. Physically, however, the painting does not change.



By **'interactive art system'** we mean the category where human actions, or measurements from human bodies such as heart rate, affect the behaviour of the system.
"Open system"= which at least some of the elements can be changed by external forces.

Ernest Edmonds

Cornock and Edmonds 1970 paper discussed in a later chapter 'Art, Interaction and Engagement'.

JUST FEW NAMES AND FACTS

"Open works" = "works in progress" Umberto Eco, 1962

"Interactive Art" rather than " participatory"

"participatory art"

MARCEL DUCHAMP — 1915

JOHN CAGE — 1952

YAACOV AKAM — 1953

JOHN CAGE — 1957

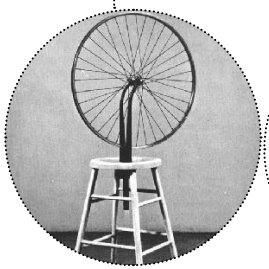
Happenings

NICOLAS SCHÖFFER — 1956

ROBERT RAUSCHENBERG — 1959

CYBERNETIC SERENDIPITY — 1968

EDWARD IHNATOWICZ — 1970



Bycicle Wheel

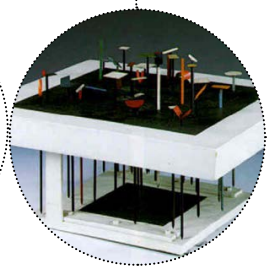
excited perhaps by the new technology in bicycle wheel hubs

http://infospigot.typepad.com/infospigot_the_chronicles/2009/07/bicycle-wheels.html

4: 33 'silent' piano piece

incomplete without the actions and attention of the audience

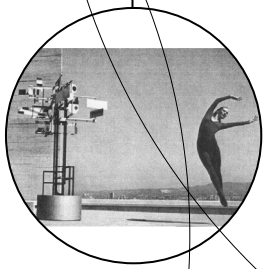
http://www.moma.org/d/assets/



Transformable Reliefs

artworks that could be rearranged by the audience

http://www.artnet.com/WebServices/images/



CYSP 1: Dynamic Sculpture

interacted with a dancer and the environment, using photoelectric cells and a microphone as sensors

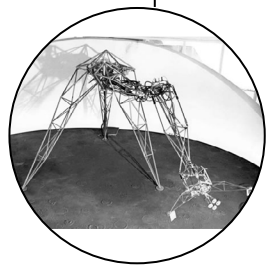
http://cyberneticzoo.com/wp-content/uploads/Schoffer-Cysp-_0014%20-%20Copy-x640.jpg

'combine' painting Broadcast

which had three radios built into it that members of the audience were free to tune as they wished.

http://www.rauschenbergfoundation.org/artist/chronology-new

exhibitions of early cybernetic and computer-based art. LONDON.



The Senster

was a very early, possibly the first, interactive sculpture driven by computer.

http://www.interactivearchitecture.org/2008/senster1.jpg

KEY IDEAS

current focus

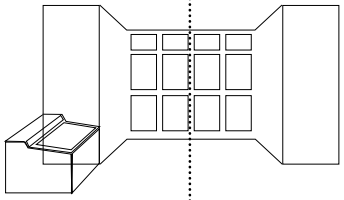
understanding and exploring the area in terms of participant experience

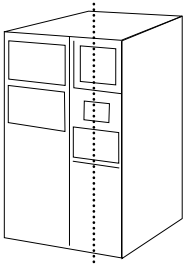
Experience can take many forms, from pleasure to fear, from captivation to creation, of danger, of difficulty, of joy.

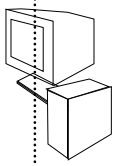
Costello and Edmonds,

A few examples of the technologies that have been employed include robotics, global positioning systems, the web, virtual reality and many interaction techniques, such as gesture recognition, image processing and active objects

TECHNOLOGICAL PROGRESS

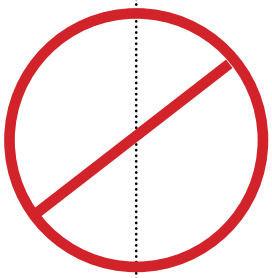






NARRATIVE

no linear narrative



engage the audience in a narrative building experience

Chris Bowman, Mike Leggett, Sarah Moss and Damian Hills

INTRO_ TOOLS

TOOLS

ARDUINO

It's a hardware and software company, project, and user community that designs and manufactures computer open-source hardware, open-source software, and microcontroller-based kits for building digital devices and interactive objects that can sense and control physical devices.

Max / MSP / Jitter:

It's a visual programming language that helps you build complex, interactive programs without any prior experience writing code. MaxMSP is especially useful for building audio, MIDI, video, and graphics applications where user interaction is needed.

Maxuino:

It's a max patch that lets you use max software to program arduino hardware.

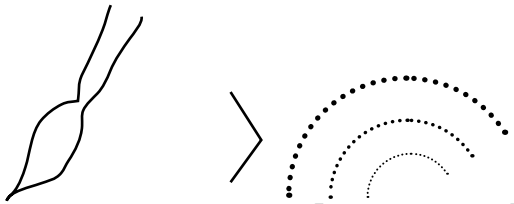
Sensors:

Webcam, temperature, accelerometer, microphone, light, humidity, water level, air pollution, tilt, joystick, potentiometers, infrared (IR), ultrasonic (distance), EEG, ECG (EKG), etc.

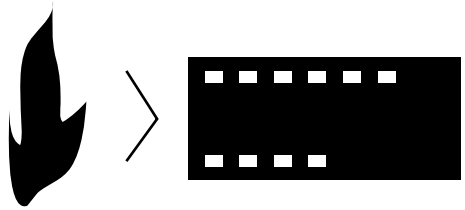
PATCHES TO BE EXPLORED

1) WATER

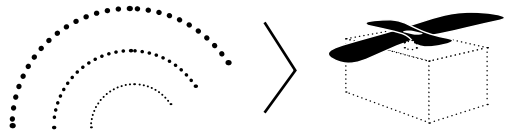
(Play a melody by touching water)

2) PAINT 

(Turn the motor by playing the right pitch)

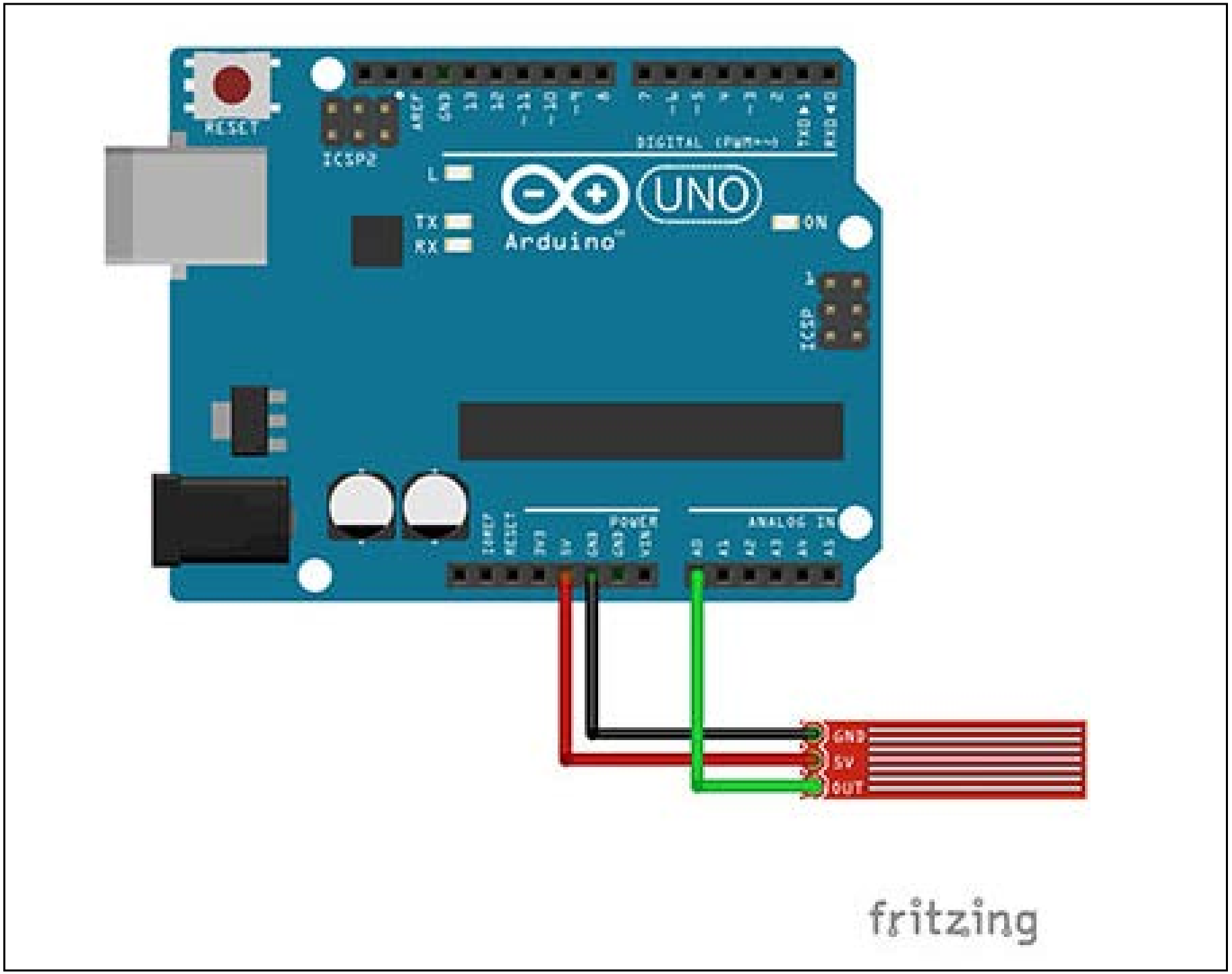
3) FIRE 

(Change Video FX with photoresistor)

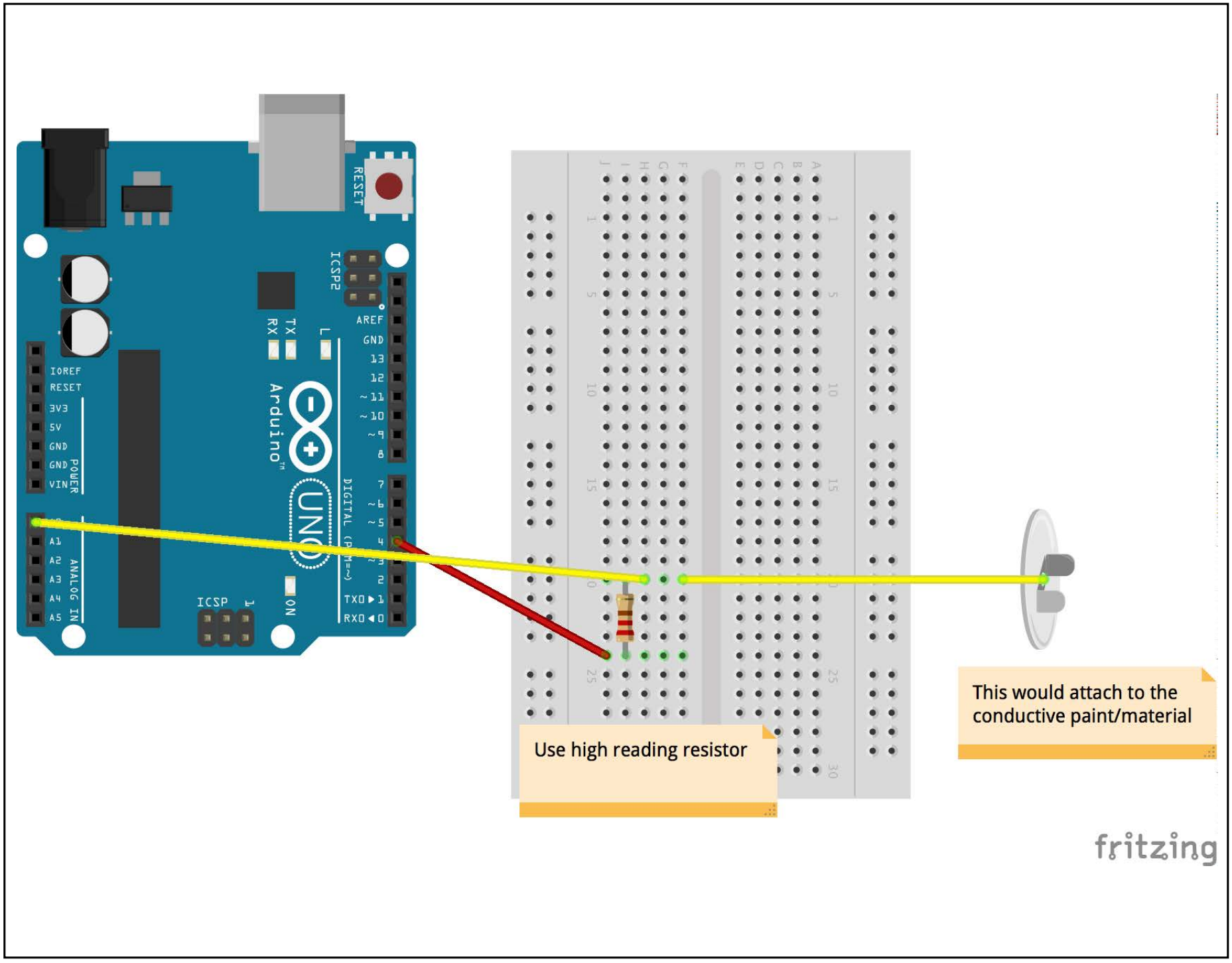
4) MOTOR 

(Motor speed controlled by the pitch)

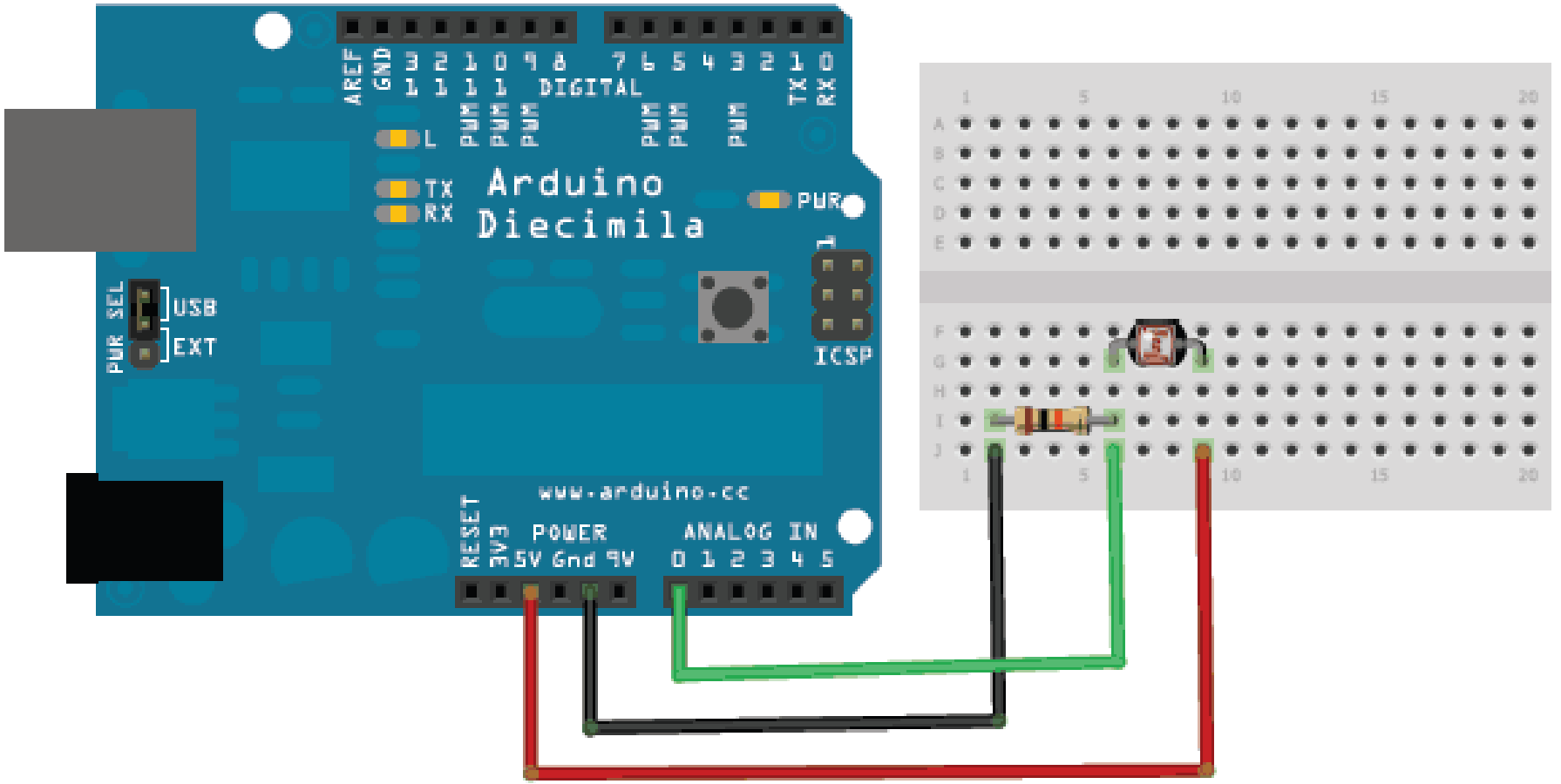
WATER


RESET
ICSP2
L
TX
RX
Arduino
UNO
ON
ICSP
DIGITAL (PWM~)
POWER
ANALOG IN
GND
5V
OUT
fritzing

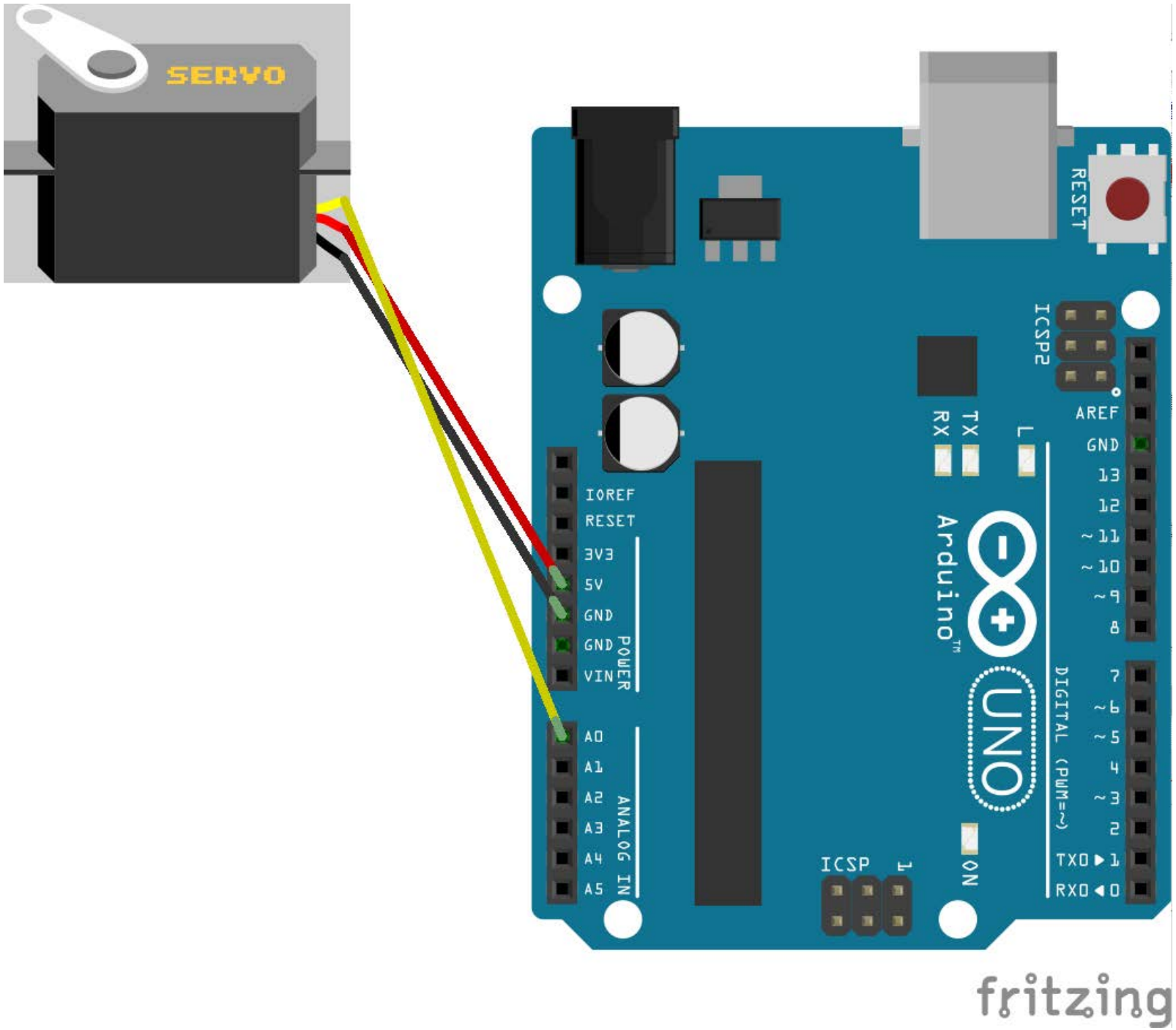
PAINT


Use high reading resistor
This would attach to the conductive paint/material
fritzing

FIRE


AREF
GND
DIGITAL
TX
RX
L
TX
RX
Arduino
Diecimila
PWR
PWR SEL
USB
EXT
ICSP
www.arduino.cc
RESET
3V3
POWER
5V Gnd 9V
ANALOG IN
0 1 2 3 4 5

MOTOR


SERVO
RESET
ICSP2
AREF
GND
13
12
~11
~10
~9
8
7
~6
~5
4
~3
2
TX→1
RX←0
DIGITAL (PWM=~)
TX
RX
L
ON
ICSP
1
IOREF
RESET
3V3
5V
GND
GND
VIN
POWER
A0
A1
A2
A3
A4
A5
ANALOG IN
UNO
Arduino™
fritzing

HANDS ON

If later you will have any questions / ideas on collaboration - you are welcome to write to us:

Dillon Bastan

www.facebook.com/
dillonbastanartist

The2vvo

Eldar and Lena

www.facebook.com/
the2vvo

thanks for coming today;
thanks,Studio 106, for hosting us.

JULY 30. 6-9 pm
VOR ORT EXHIBITION @ STUDIO 106 LA