

**selected  
projects  
using  
resources  
from  
the face  
control kit.**

**FACE  
CONTROL  
ideas book.**

**FACE CONTROL KIT**

**eyebrowpong.com  
josephlyons.info**

# INDEX:

>        *PHYSICAL*  
/        *PROJECTS*

1.        PINBALL
2.    FRUIT SLICER
3.    SKATEBOARD

>        *DIGITAL*  
/        *PROJECTS*

1.        TEMPO
2.        PONG

# what is this?

*The 'ideas book' documents a handful of ideas that implement the open source resources sited in the FACE CONTROL KIT, allowing you to control physical and digital projects with your face.*

*However, this is NOT A CONCLUSIVE LIST of projects you could build with the face control kit.*

*The kit was built to give you the means to create your own expressive interactions with the world around you and*

*incorporate this into your own designs.*

*Take these ideas and make them bigger, make them tinier, make them brighter, make them more expressive, more fun, more beautiful, more ugly.*

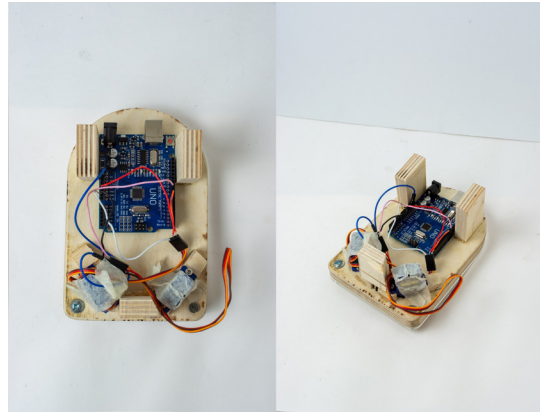
*Take these ideas and MAKE THEM BETTER than we did.*

*Most of all, enjoy the process of making something.  
- Joe, The Face Control Kit.*



# / 1. **PHYSICAL PROJECTS** **PINBALL**

*Eyebrow Controlled Pinball - using faceOSC, Puredata & Arduino.*



*Eyebrow Controlled Pinball is a miniature pinball machine design that uses your eyebrows to trigger the pinball paddles. FaceOSC tracks the location of your eyebrows and when they are raised above a threshold each paddle will raise and hit the ball. Made from lasercut ply, mini servos & arduino uno.*

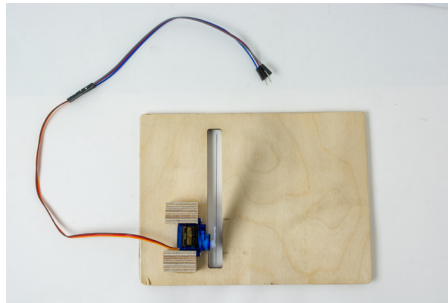
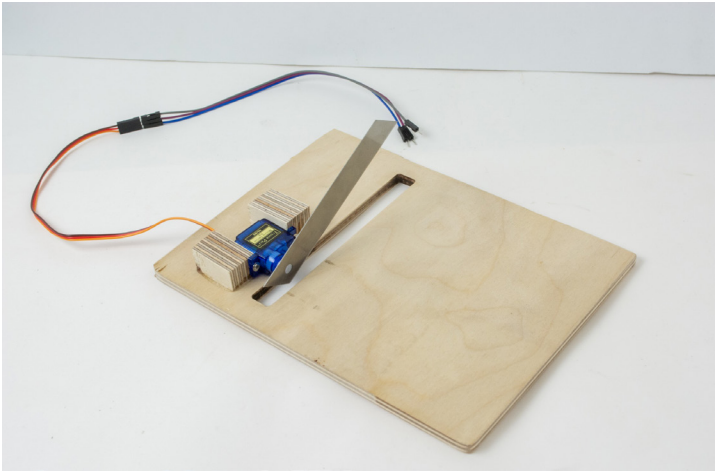
# PHYSICAL PROJECTS

## 2. FRUIT SLICER

*Eyebrow Controlled Fruit Slicer - using  
faceOSC, Puredata & Arduino.*

*Eyebrow Controlled  
Fruit Slicer is a fully  
functional soft fruit  
slicer for slicing  
banana, mango  
& other soft fruits.  
Using software from  
the Face Control  
Kit, plywood, mini*

*servos, a craft knife  
blade & arduino.  
The blade will be  
triggered when  
the eyebrows are  
'frowned' over a  
certain threshold. A  
good stress reliever.*



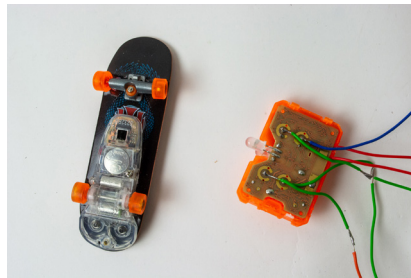
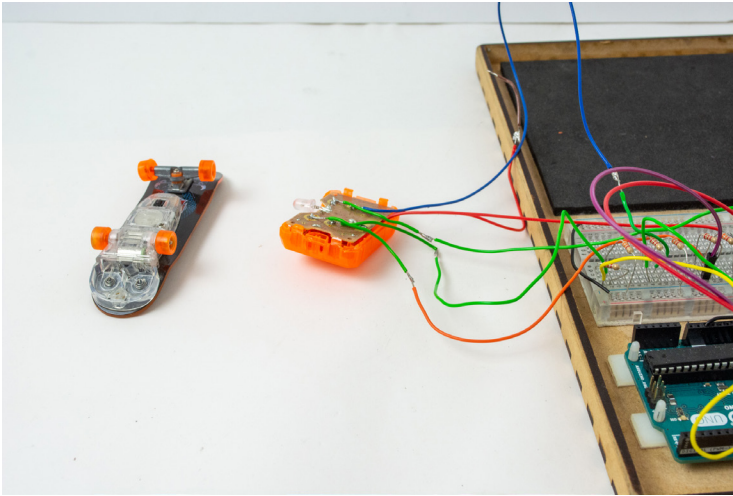
# PHYSICAL PROJECTS

## 3. SKATEBOARD

*Eyebrow Controlled Skateboard - using Tony Hawk Circuit-boards RC Skateboard, Arduino & a little bit of soldering.*

*Eyebrow Controlled Skateboard is an arduino hack that allows you to control a miniature RC Skateboard with you're eyebrows. A 'Raise' sends it forward and a*

*'Frown' sends it backwards using thresholds. Although this example is specific - hacking buttons with arduino is easily replicated with any RC toy...*

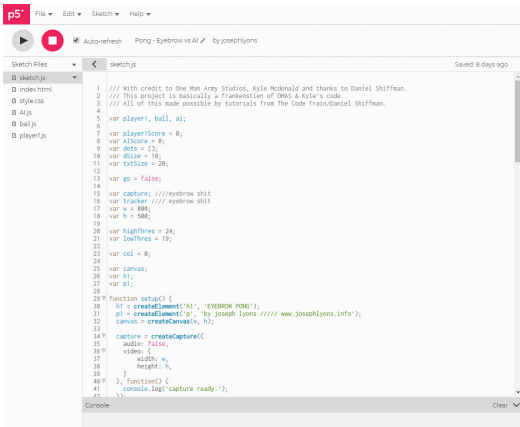




# /

## 2. DIGITAL PROJECTS PONG

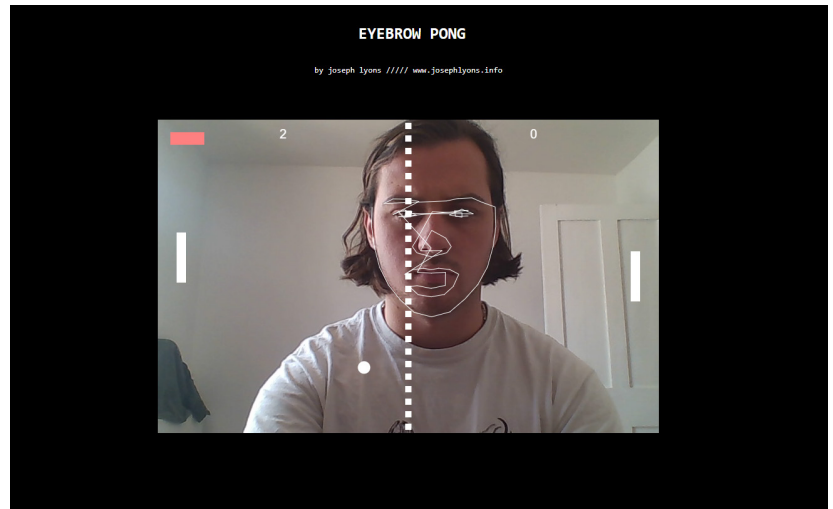
*EYEBROWPONG.COM is a fully functioning website hosting the first eyebrow controlled pong game online.*



```
1 // with credit to One Man Army Studios, Kyle McDonald and thanks to Daniel Shiffman.
2 // This project is basically a transcription of One's code.
3 // All of this made possible by tutorials from The Code Train/Daniel Shiffman.
4
5 var player1, ball, ai;
6
7 var playerScore = 0;
8 var aiScore = 0;
9 var score = 0;
10 var width = 100;
11 var height = 200;
12
13 var go = false;
14
15 var capture; //eyebrow shit
16 var tracker; //eyebrow shit
17 var r = 800;
18 var h = 500;
19
20 var highThres = 24;
21 var lowThres = 19;
22 var col = 0;
23
24 var canvas;
25 var w;
26 var h;
27 var pt;
28
29 function setup() {
30   // createCanvas('11', 'EYEBROW PONG');
31   pt = createElement('p', 'by Joseph Lyons //www.josephlyons.info');
32   canvas = createCanvas(10, 10);
33   capture = createCapture({
34     audio: false,
35     video: {
36       width: w,
37       height: h,
38     }
39   }, function() {
40     console.log('capture ready.');
```

*Eyebrow Pong is a javascript project that implements the p5.js library for creating graphic and interactive projects. It is essentially a mashup of code from one man army studios & Kyle McDonalds face tracker*

*example using clmtrackr. It uses thresholds for 'raising' and 'frowning' to move the left paddle up & down the screen and play pong against an 'AI' computer program.*





*The ideas book is a source of primary ideas and concepts.*

*We want you to take these ideas and make them your own. Use the skills you've gathered and create more interesting & expressive examples.*

*We hope the ideas gave you some source of inspiration. If not, we want to see you make it better!*

*To see detailed documentation of the ideas & templates for beginning your own, visit the repo:*

[www.github.com/josephlyons/  
FACE\\_CONTROL\\_DIGITAL\\_TOOLKIT](https://www.github.com/josephlyons/FACE_CONTROL_DIGITAL_TOOLKIT)

# NEXT STEPS:

> **MAKE IT UGLY**

> **MAKE IT RETRO**

> **MAKE IT FAST**

> **MAKE IT CHEAP**

> **MAKE IT FAT**

> **MAKE IT BETTER**

**/ MAKE  
SOMETHING NEW.**

**as a part  
of the face  
control kit**

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