

EN 1: Engineering in the Kitchen

Steven Bell

4 October 2023



Logistics

Our final exam block is 3:30-5:30pm, Tuesday 12/19 (I+ block)

We will have a final project showcase + food

We will have class on 11/20 (Monday before Thanksgiving).

Let me know if you'd like to come to my house for Thanksgiving day - I'll provide transportation, and we'll play with circuits and eat good food.

Capacitive touch input

Capacitive touch input

```
from machine import TouchPad, Pin
t = TouchPad(Pin(13))
print(t1.read())
```

SSD1306

Project 2: building a microwave control panel

You will design and build your own microwave control panel.

It must:

- 1) Allow a user to specify different amounts of time to cook
- 2) Indicate the time remaining in some way
- 3) Turn off the microwave if the door is opened

Microwave control "pigtail"

Highland

0:16

Power

Popcorn



Defrost

Clock

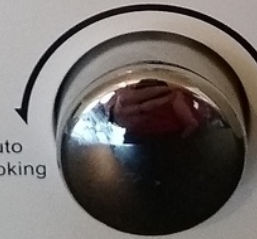


Pause/Cancel

Start



Auto
Cooking



Time
Weight



Some inspiration

Music with the MakeyMakey

<https://www.youtube.com/watch?v=wkPt9MYqDW0>

J.Views plays with veggies

<https://www.youtube.com/watch?v=xvmTav3SYsc>

Pizza Hut - Dip Hop



Internet of Shit @internetofshit · 22 jul.

And you bought the oven 😎



Adam Baldwin @adam_baldwin · 22 jul.

Just updated the firmware on my oven. The future is stupid. 🔥

30

159

1,9 mil



Internet of Shit retweeted



Elon Musk ✓

@elonmusk

En respuesta a [@internetofshit](#)

My oven keeps asking for my wifi password. It's not gonna get it.

[Traducir Tweet](#)

4:13 a. m. · 23 jul. 2020 · [Twitter for iPhone](#)



Internet of Shit @internetofshit · 22 jul.

And you bought the oven 😎



Adam Baldwin @adam_baldwin · 22 jul.

Just updated the firmware on my oven. The future is stupid. 🔥

30

157

2 mil



Elon Musk ✓ @elonmusk · 23 jul.

My oven keeps asking for my wifi password. It's not gonna get it.

222

424

4,6 mil



Riku Mattila

@rmattila74

En respuesta a [@elonmusk](#) y [@internetofshit](#)

Easy for you to brag, with a functional body. For me, wifi appliances are the only ones I can use from my bed.

[Traducir Tweet](#)

4:27 a. m. · 23 jul. 2020 · Twitter Web App

For next time

Talk with your partner and work out your control panel concept

Put two things in OneDrive by **Friday**:

- Very brief description of your concept

- State diagram for your control panel