

My grandmother's letter made tangible



Maya

## Maya

A two-piece interactive experience that embodies a letter written by my late grandmother, Maya, while living with dementia.

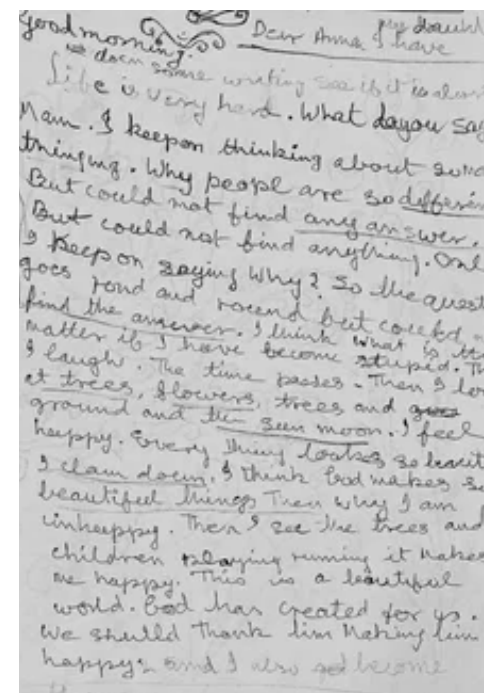
- 01 Her story
- 02 The Project
- 03 CNC
- 04 Electronics
- 05 Integration
- 06 Future scope
- 07 About Me

# Maya

My grandmother, my nani.

A writer, an artist, and a source of endless curiosity. Through her letters, her drawings, and her experience with dementia, she taught me that memory is fragile, identity is fluid, and beauty can persist even when certainty fades.

Māyā (माया) is a Sanskrit word often translated as *illusion* — the idea that reality is fluid, layered, and not always what it seems.





C

The mirror frame is designed from her art and the mirror is an one way mirror

D

The one way mirror has a monitor and camera behind that turns on to display your face.

The experience is an embodiment of loss of recognition as your face changes, distortion as identity is lost and finally recreation vines and flowers.

A

Her letter marked on acrylic lights up with neopixels

B

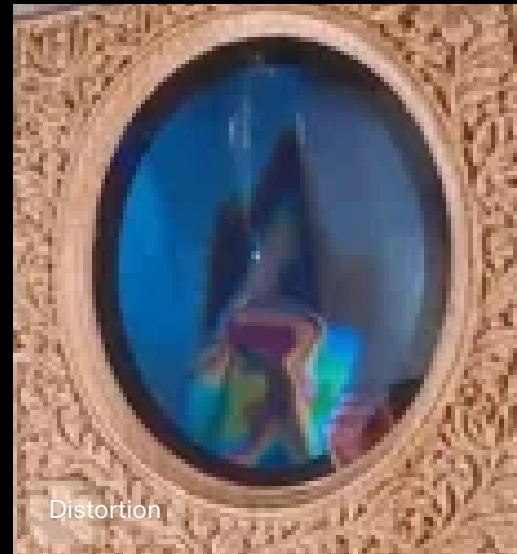
PIR controls all interactions

# The Experience

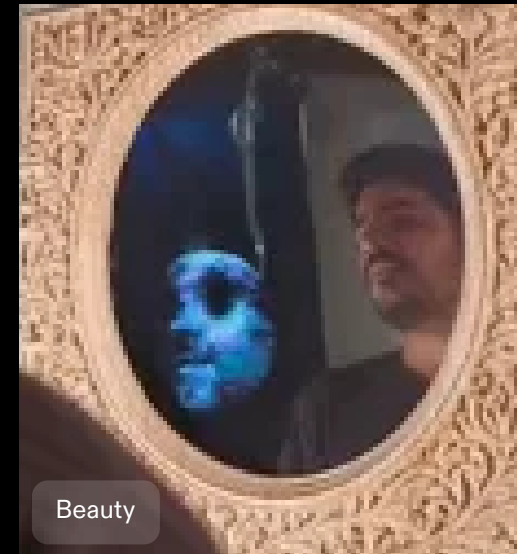
Your mirror reflection gets replaced with webcam footage while your face changes



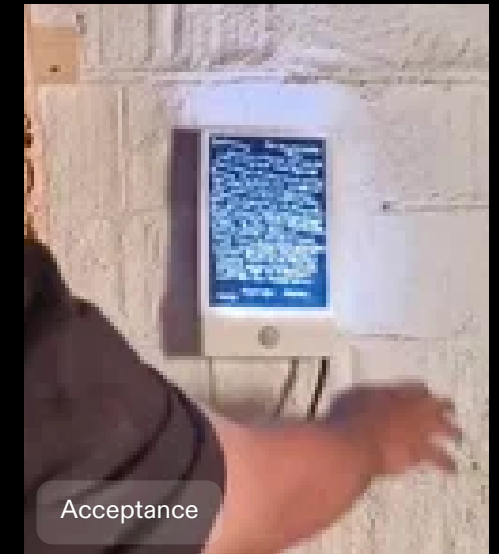
After losing recognition your face completely disintegrates



Finally your face is redrawn with vines and flowers



PIR controls these states and lights up the letter



Why people are so different

the question goes round and round

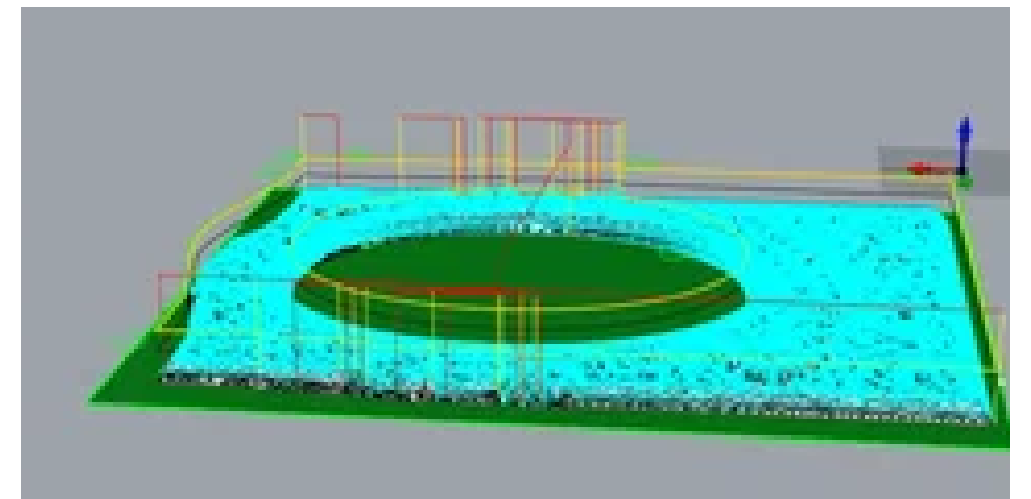
Every thing looks so beautiful  
Then why I am unhappy

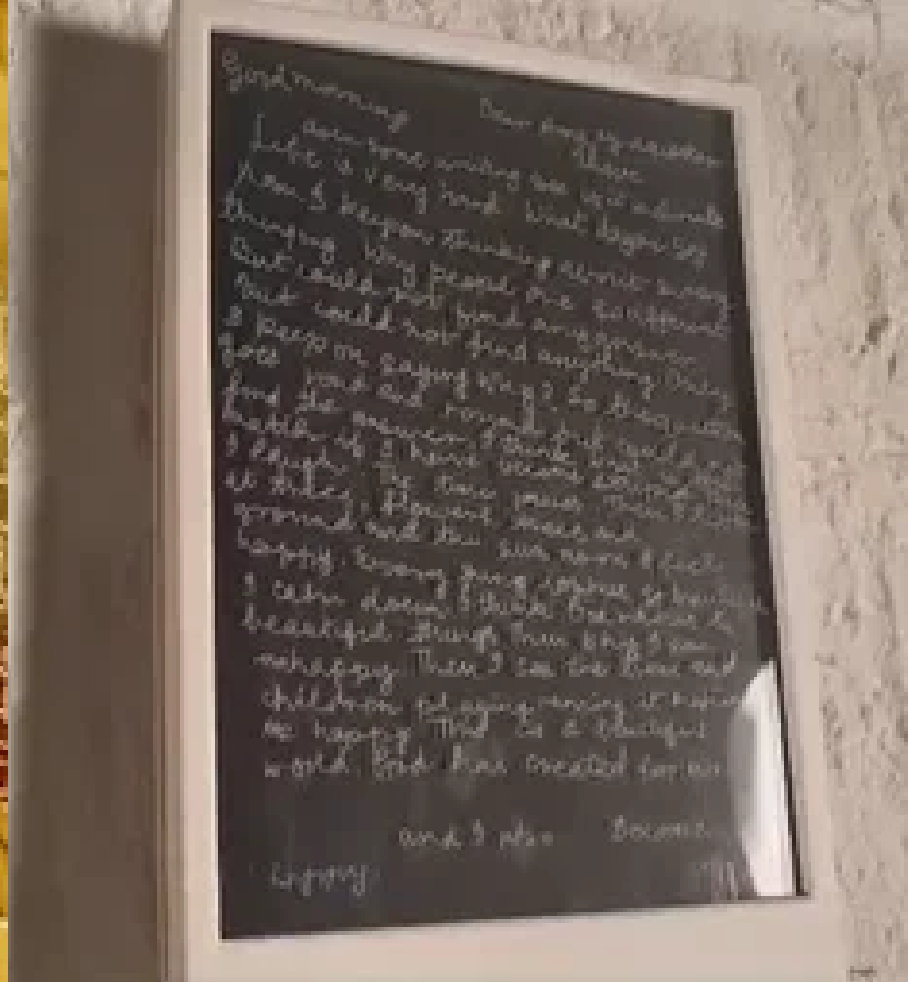
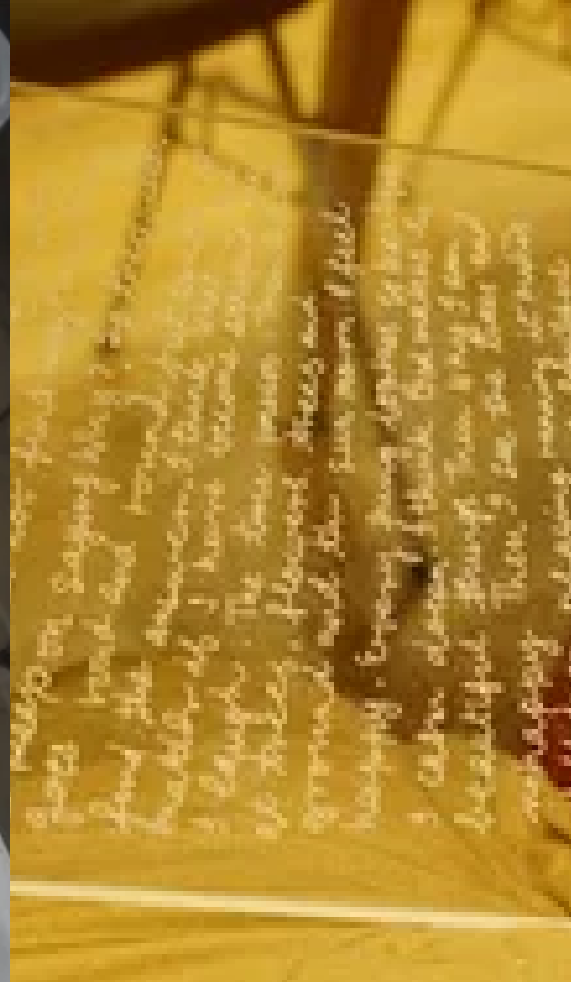
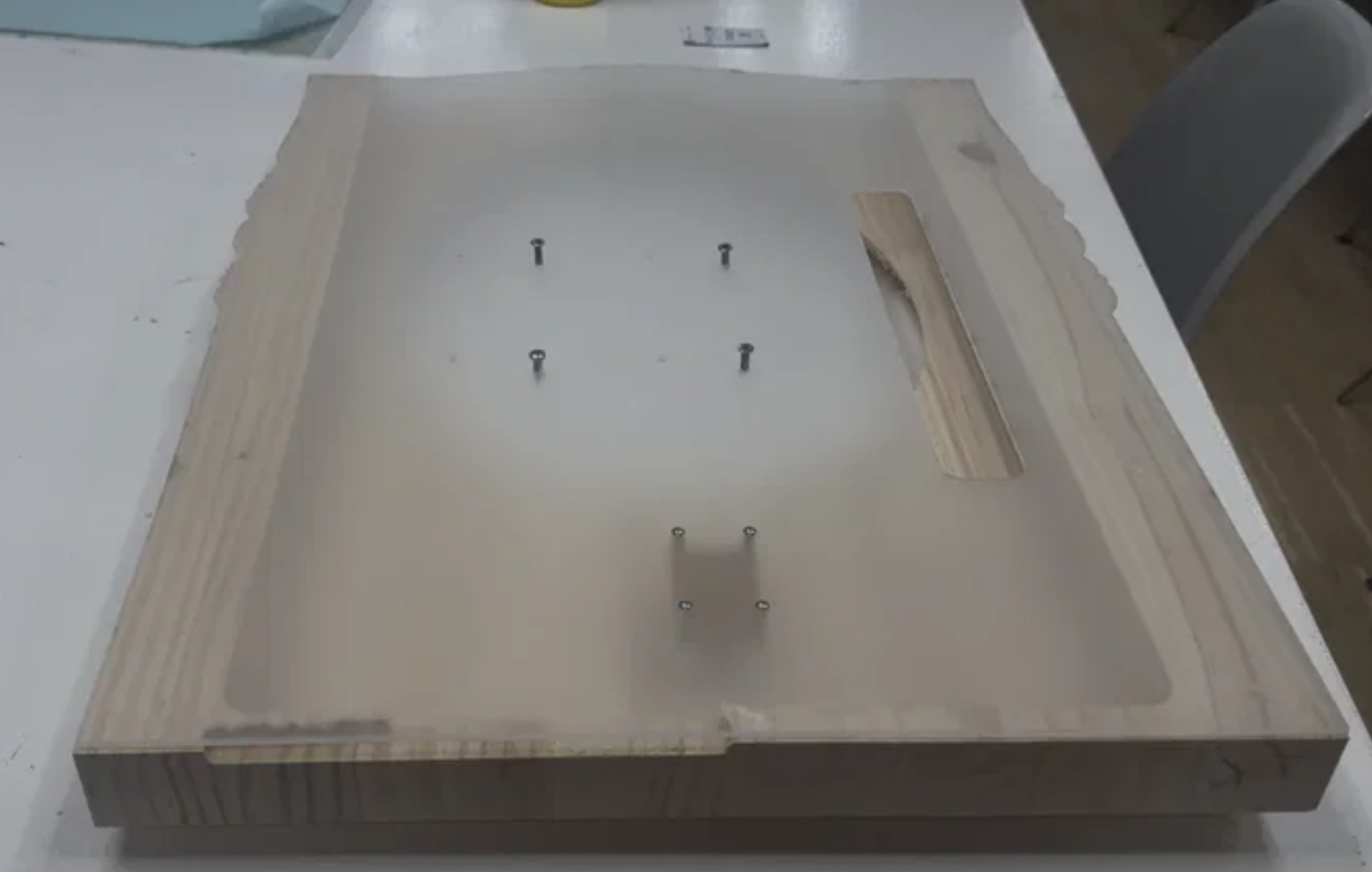
I think ~ What is the matter  
if I have become stupid



# CNC

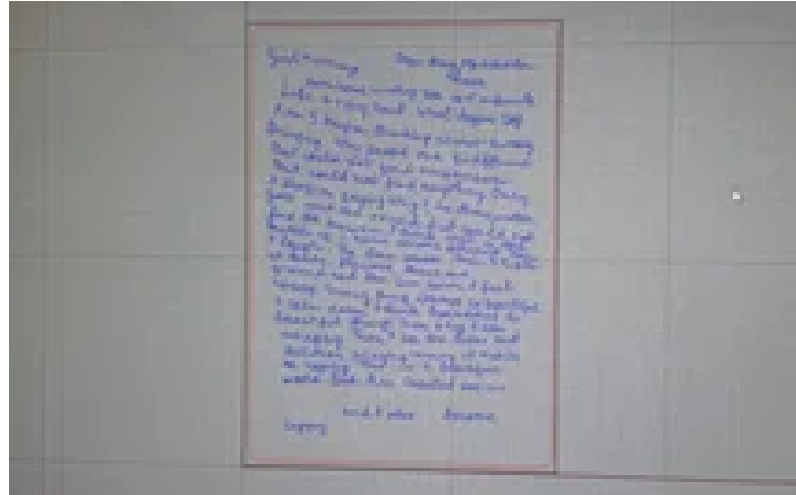
| Operation                   | Tool       | Time     | Feed |
|-----------------------------|------------|----------|------|
| Standard drill              | 12 mm flat | 1 h 50 m | 2000 |
| 2½-axis pocketing           | 12 mm flat | 34 m     | 2600 |
| Horizontal roughing         | 6 mm flat  | 1 h 19 m | 2600 |
| Parallel finishing (relief) | 4 mm ball  | 1 h 33 m | 2600 |
| Profiling (in and out)      | 12 mm flat | 12 m     | 2600 |





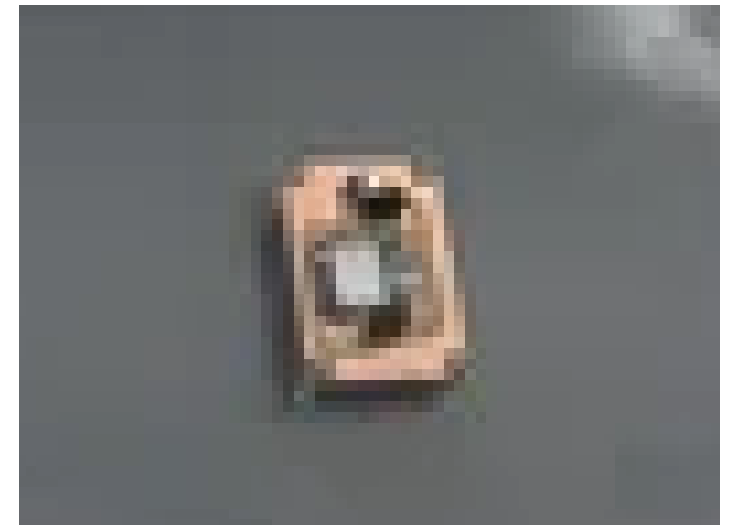
# Laser Cutting

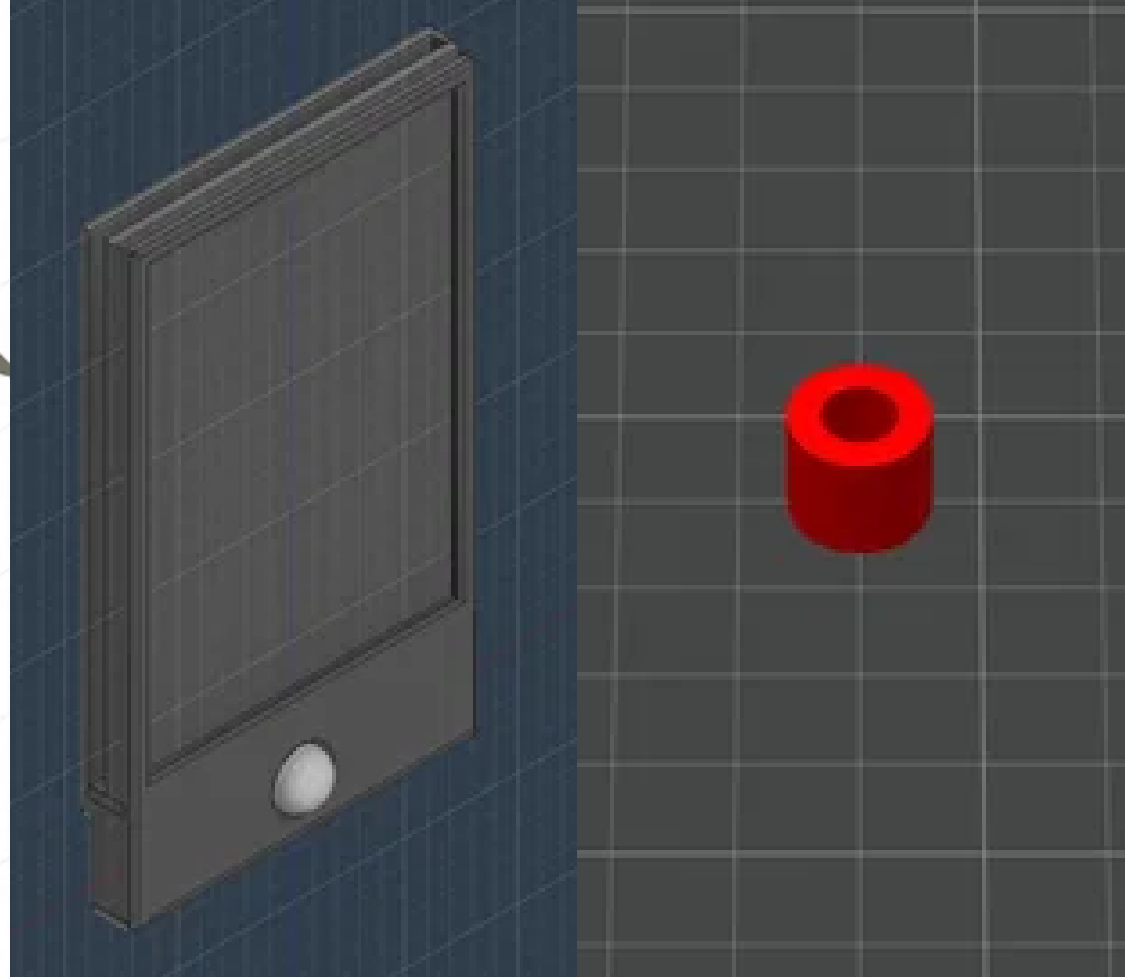
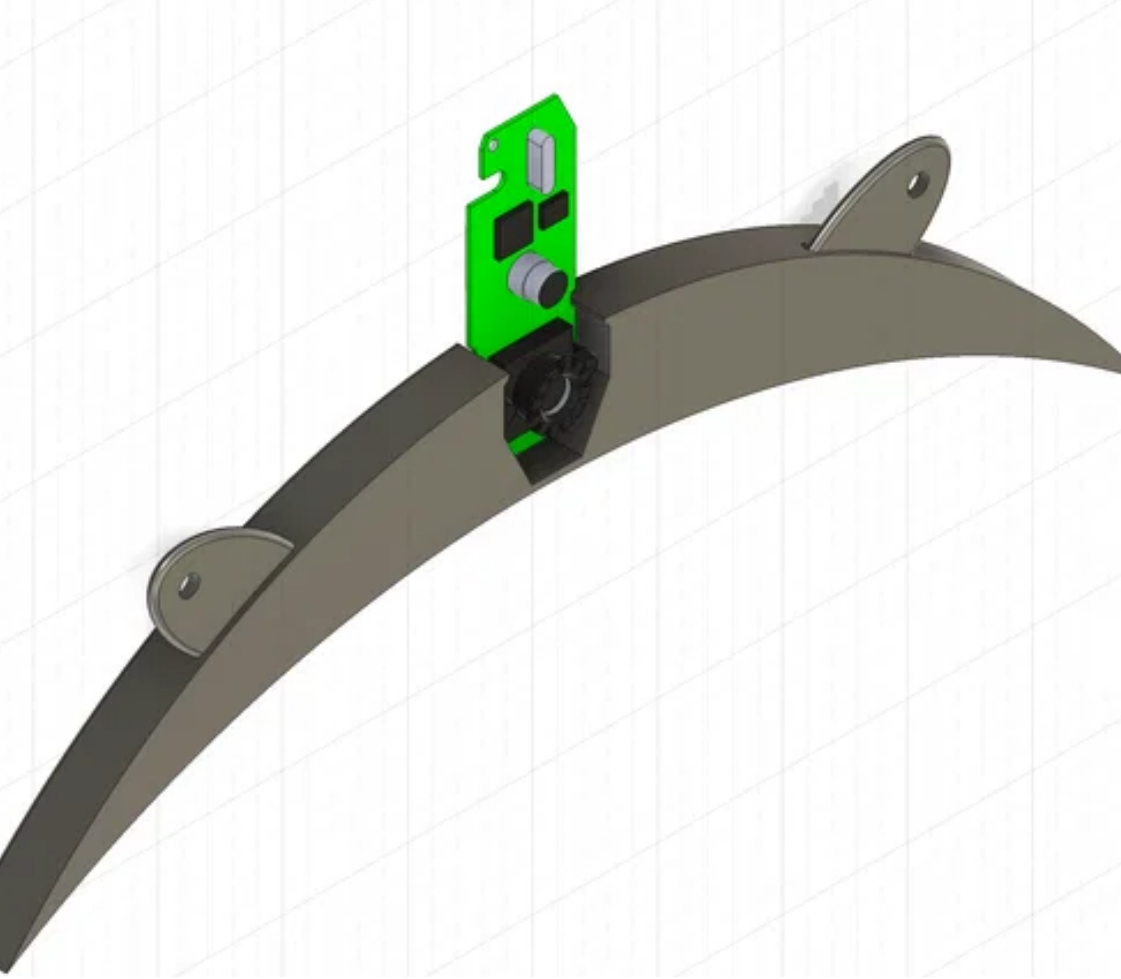
| Operation | Power | Speed | Time |
|-----------|-------|-------|------|
| Cut       | 70    | 1.1   | 2m   |
| Mark      | 12    | 1.8   | 58m  |



# Electronics

- 1.KiCAD
- 2.Soldering the parts
- 3.Testing and picking right PIR sensor
- 4.Coding, testing and mounting





# 3D Printing

- 1.The webcam was opened and the mount had to be custom made for the frame to hide it inside
- 2.The second piece was made to contain the PIR, the acrylic with the letter marked, the neopixels and a hole to hang it on the wall
- 3.Spacers and wire organisers



# Integration

1. 3D model different pieces by their rough dimensions
2. Printed out various versions to draw ideas
3. Paper modelling to scale and plan where weight shifts
4. Back plate was laser cut with screw holes to fit vesa, wood, exit of wires and mount the PCB



Shiv @  
Fab Lab BCN

Made with Chronicle