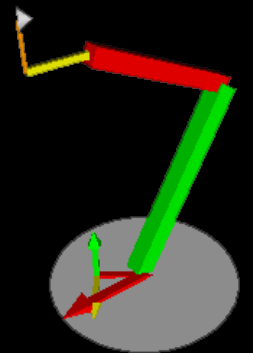


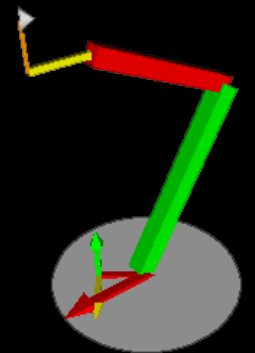
Light painting con un brazo robot casero

Sammy Pfeiffer



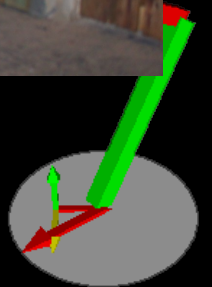
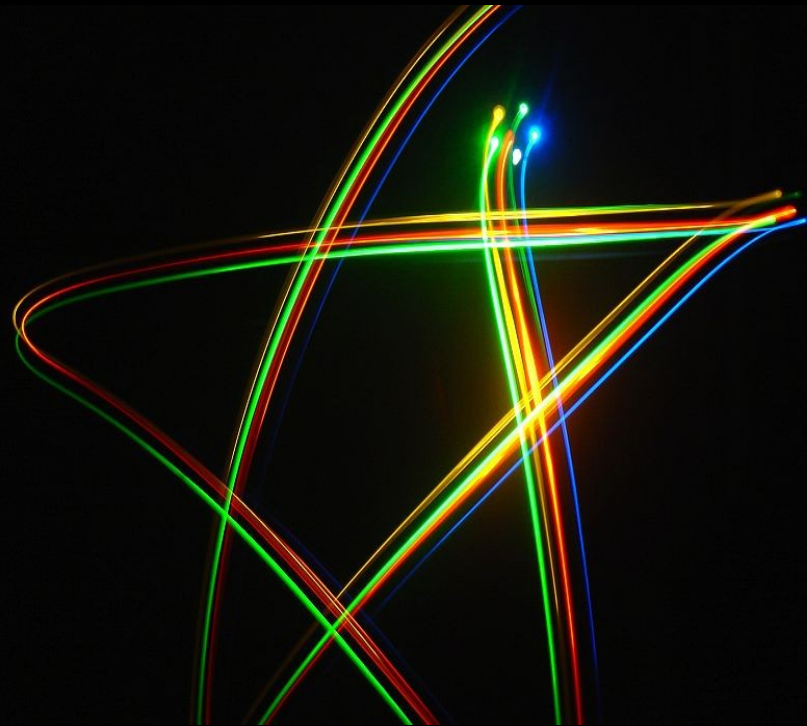
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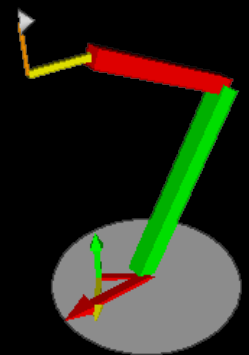
1. Introducción

- Light painting = Fisiogramas

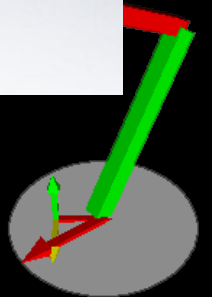
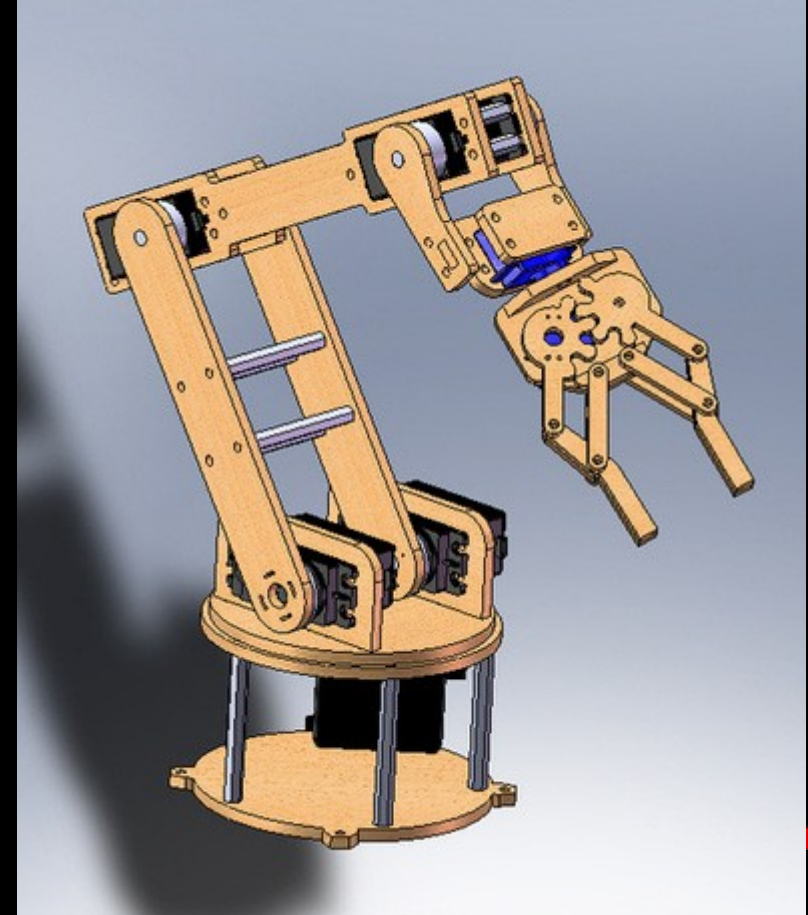
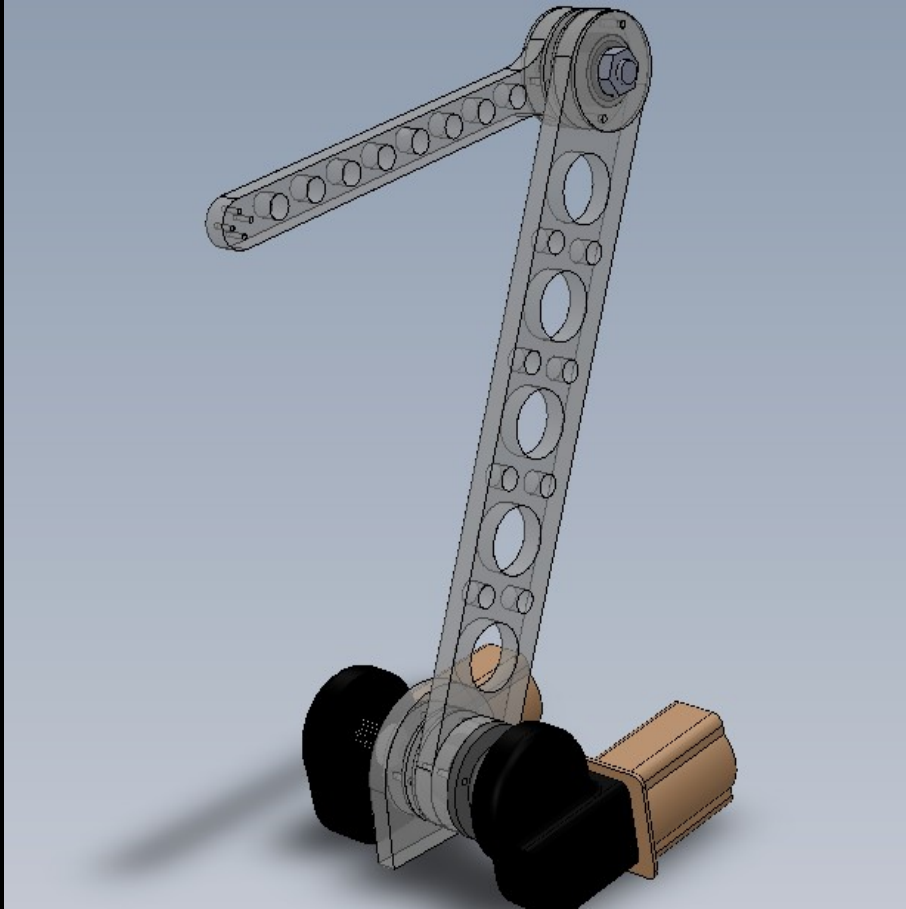


2. *Objetivos*

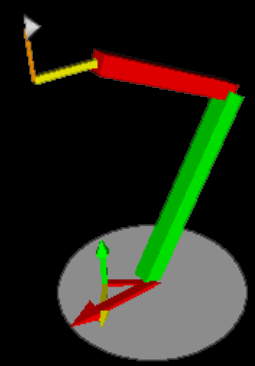
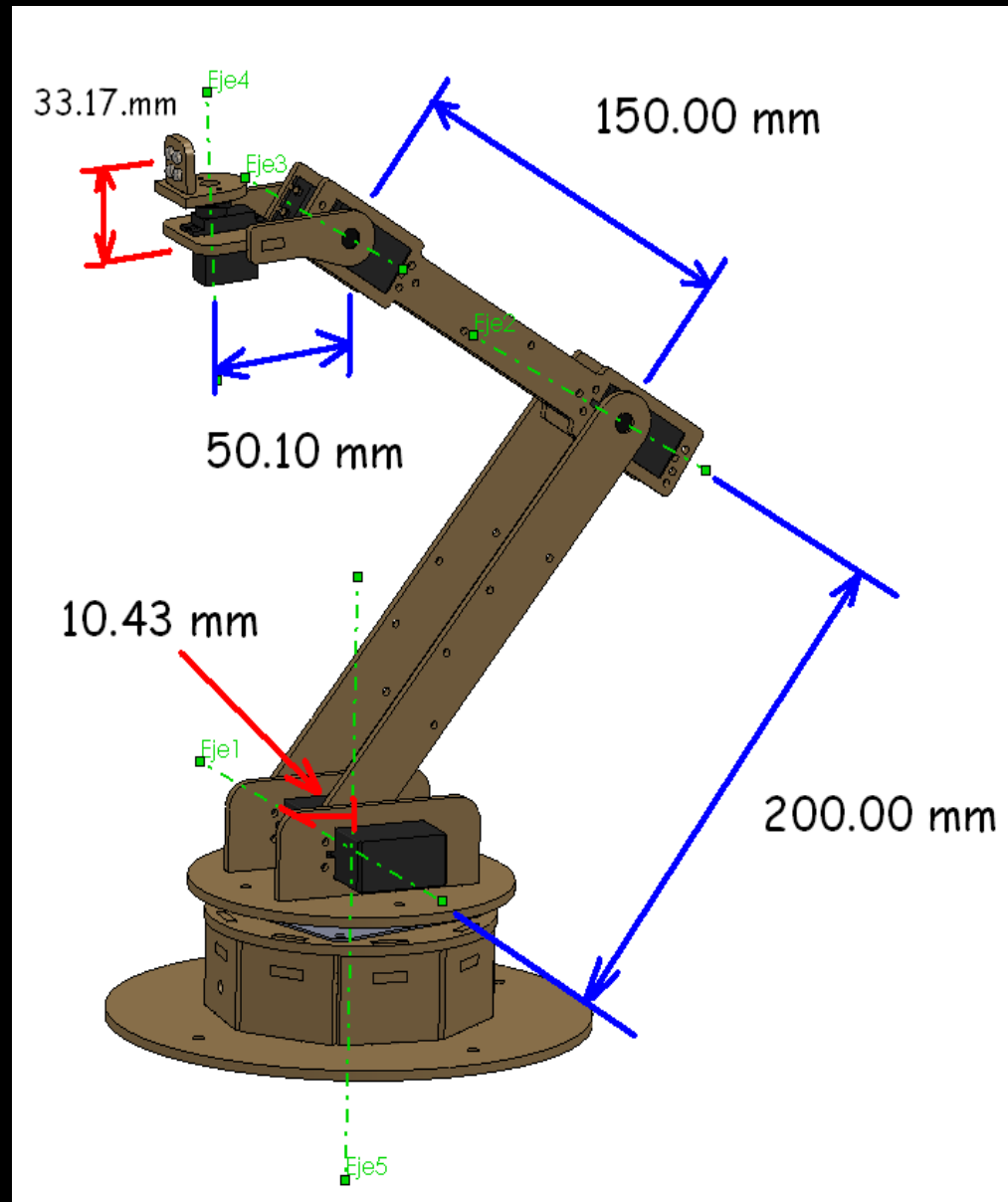
- Construcción de un brazo robot casero económico
- Programación de un simulador del brazo
- ¡Hacer light painting con él!



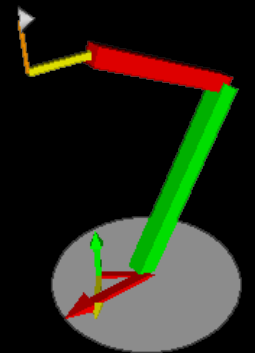
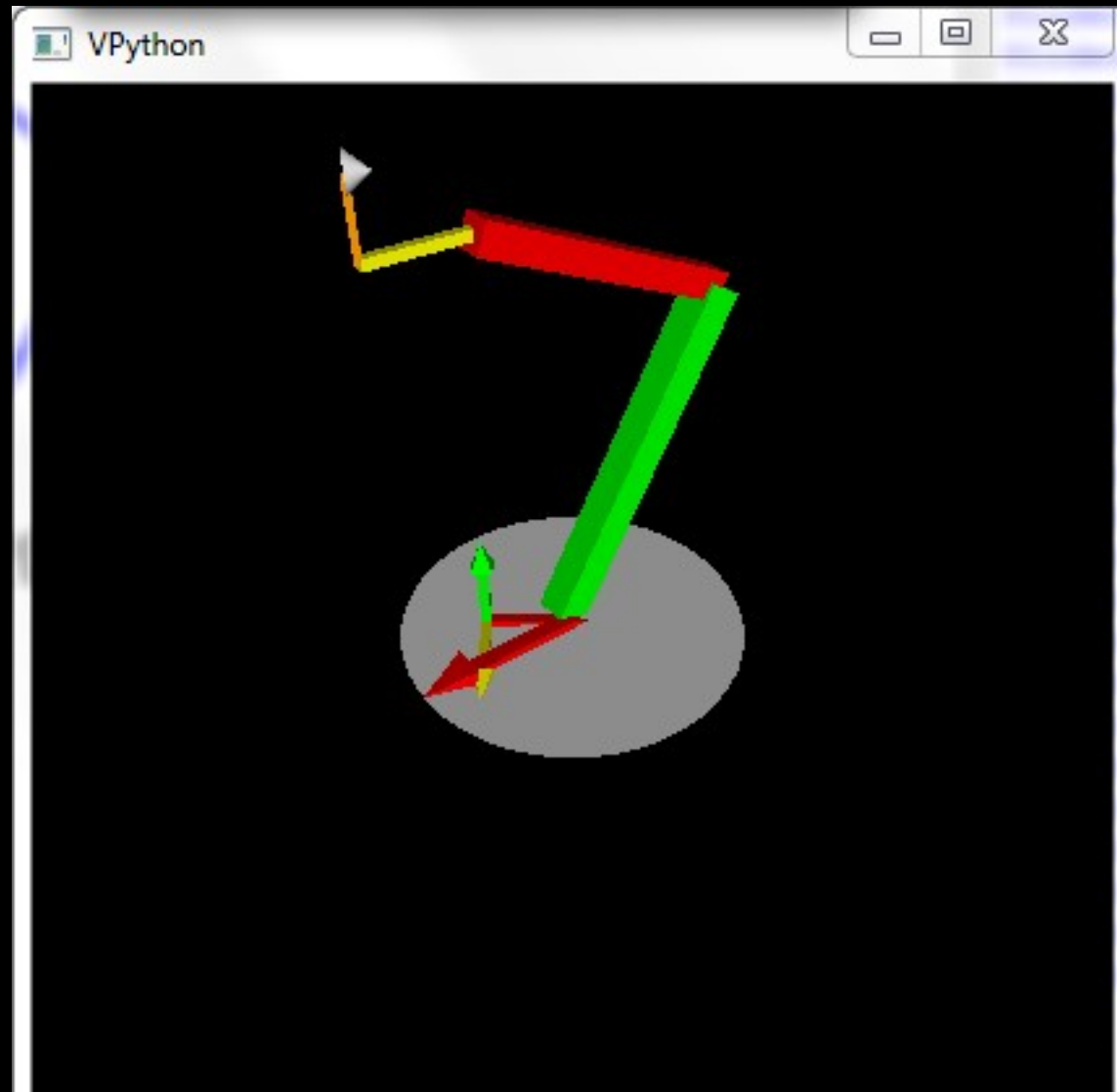
3. Diseño



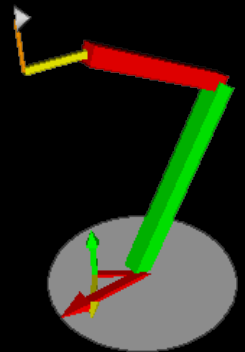
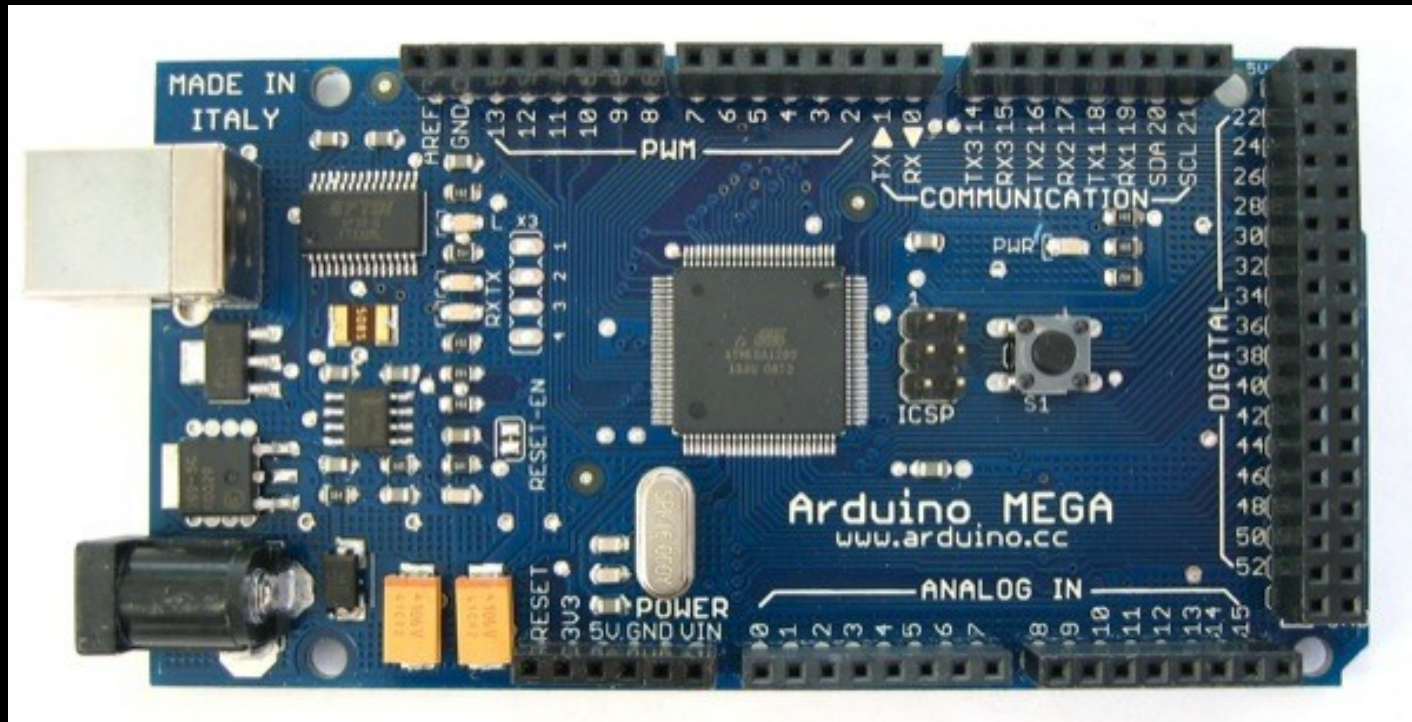
3. Diseño



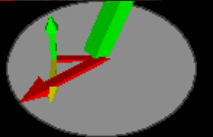
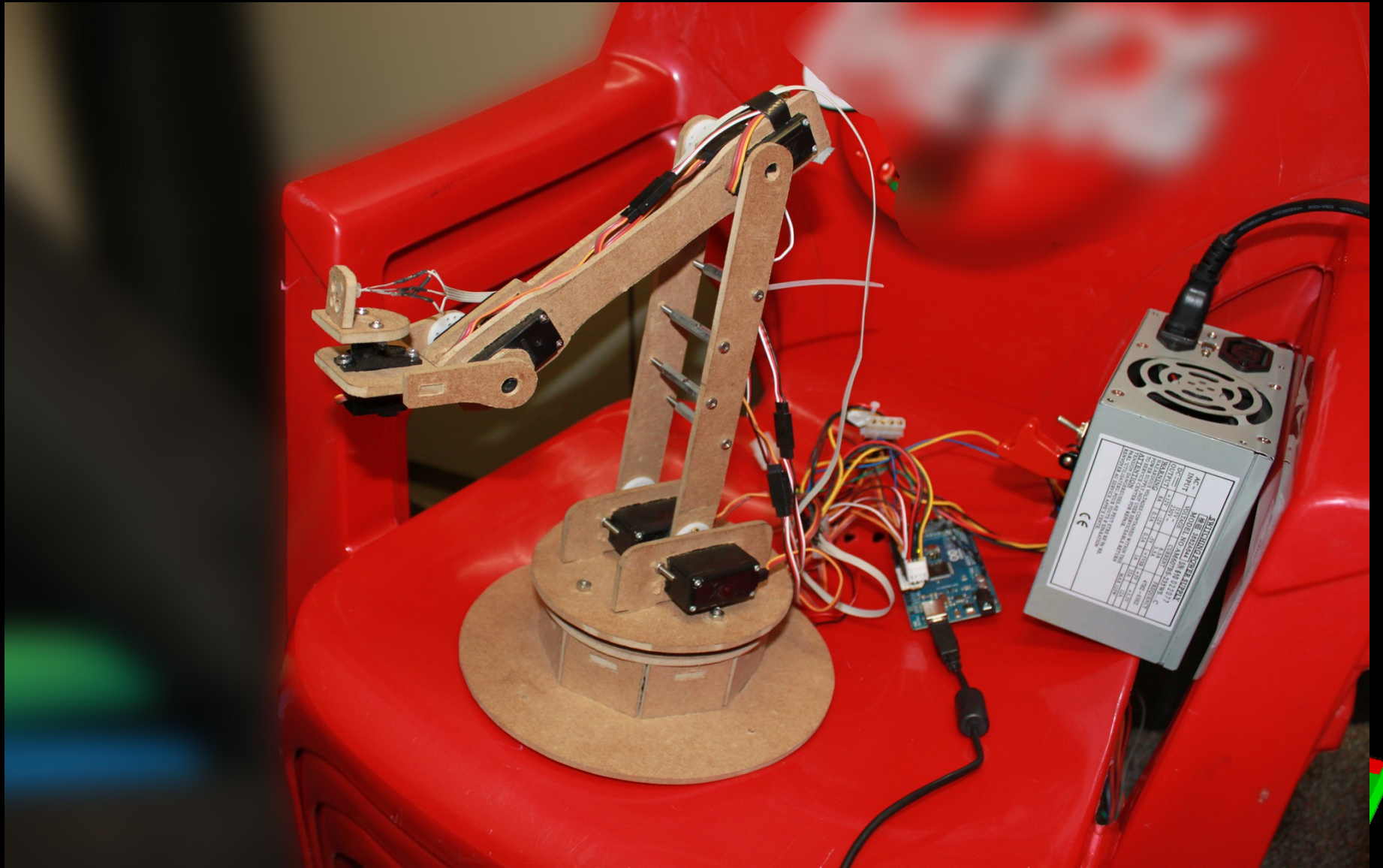
4. Simulador



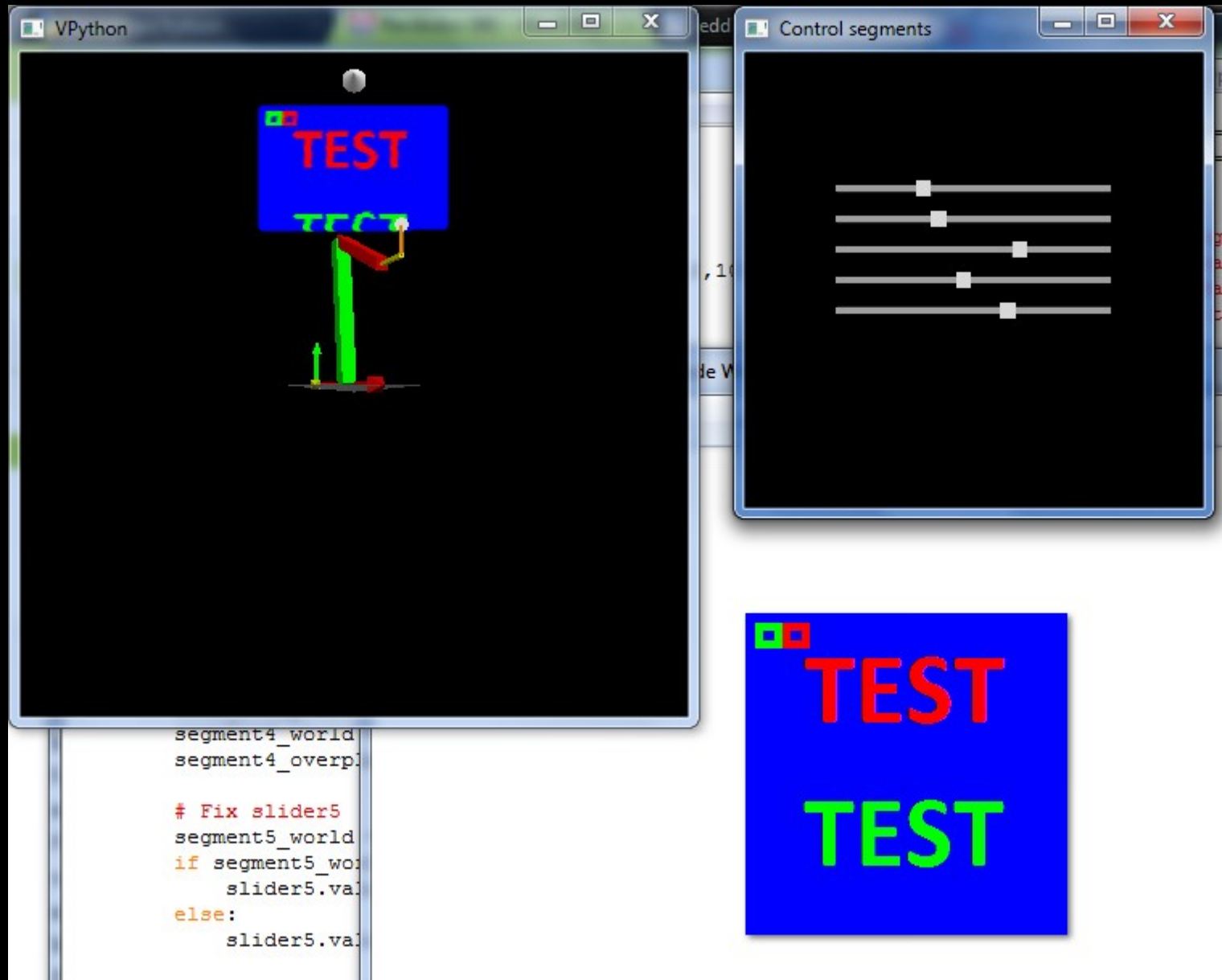
5. Control desde Arduino



6. Resultados



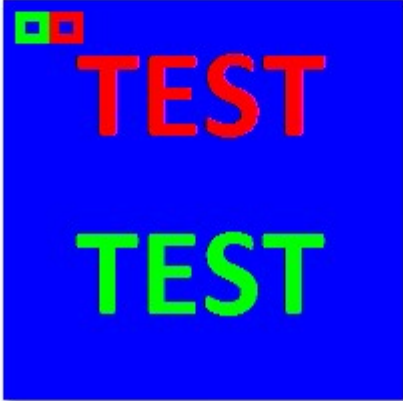
6. Resultados



The image displays a VPython application window with a 3D scene and a control panel. The 3D scene shows a green stick figure holding a blue sign with the word "TEST" in red and green. The control panel, titled "Control segments", contains five horizontal sliders. Below the 3D scene, a code editor shows the following Python code:

```
segment4_world
segment4_overp

# Fix slider5
segment5_world
if segment5_wo
    slider5.va
else:
    slider5.va
```

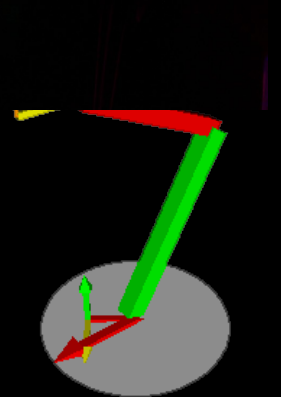
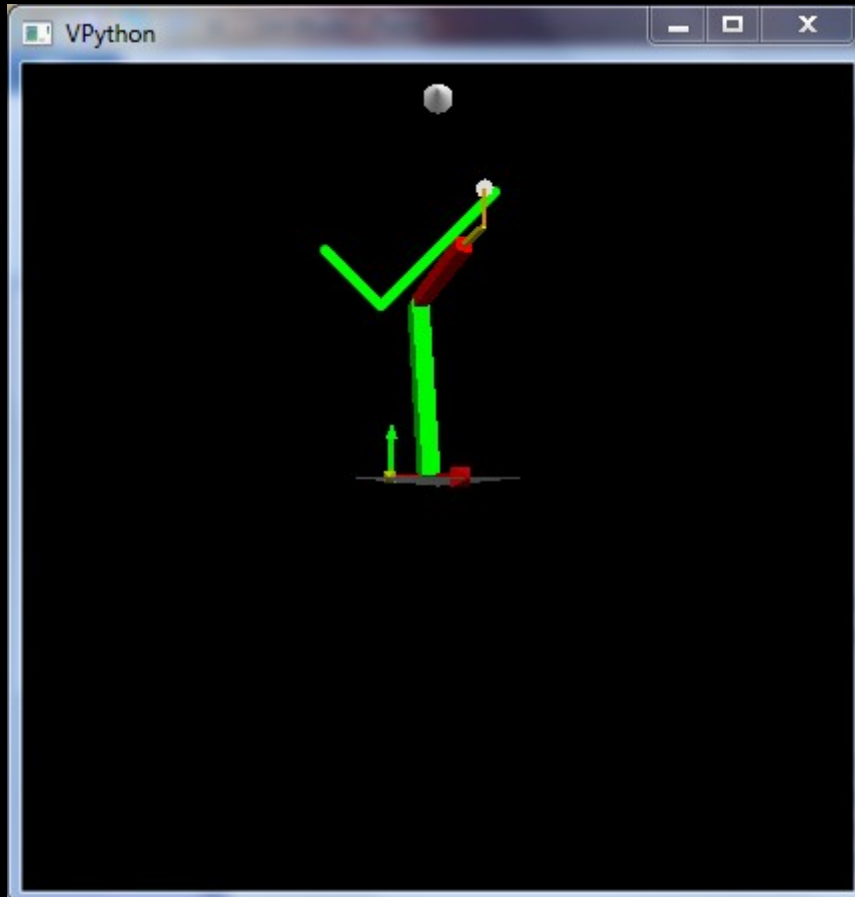


A close-up of the sign graphic, showing the word "TEST" in red and green on a blue background.

6. Resultados

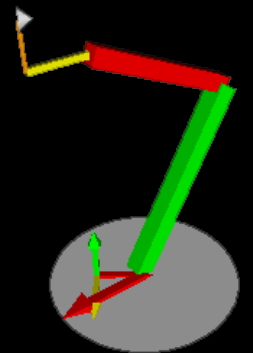


6. Resultados



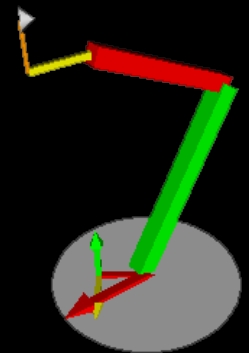
6. *Resultados*

- ¡Video(s)!



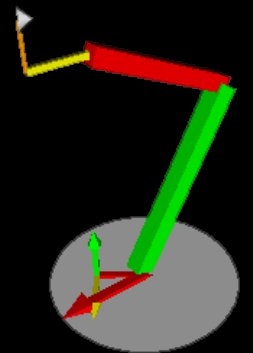
7. Conclusiones

- Posibles mejoras
- Opinión general
- Coste aproximado del proyecto:
 - Monetario: 157€
 - Tiempo: 87h
- Tecnologías utilizadas:
 - Python: Vpython, Numpy, Image
 - Arduino: Arduino Mega



8. *Agradecimientos*

- Raúl Suarez por permitirme utilizar este proyecto como presentación de la asignatura
- Asociación AESS por ayudarme a hacer este proyecto realidad
- A todos aquellos que se han interesado y han aportado su granito de arena



9. ¿Preguntas?

