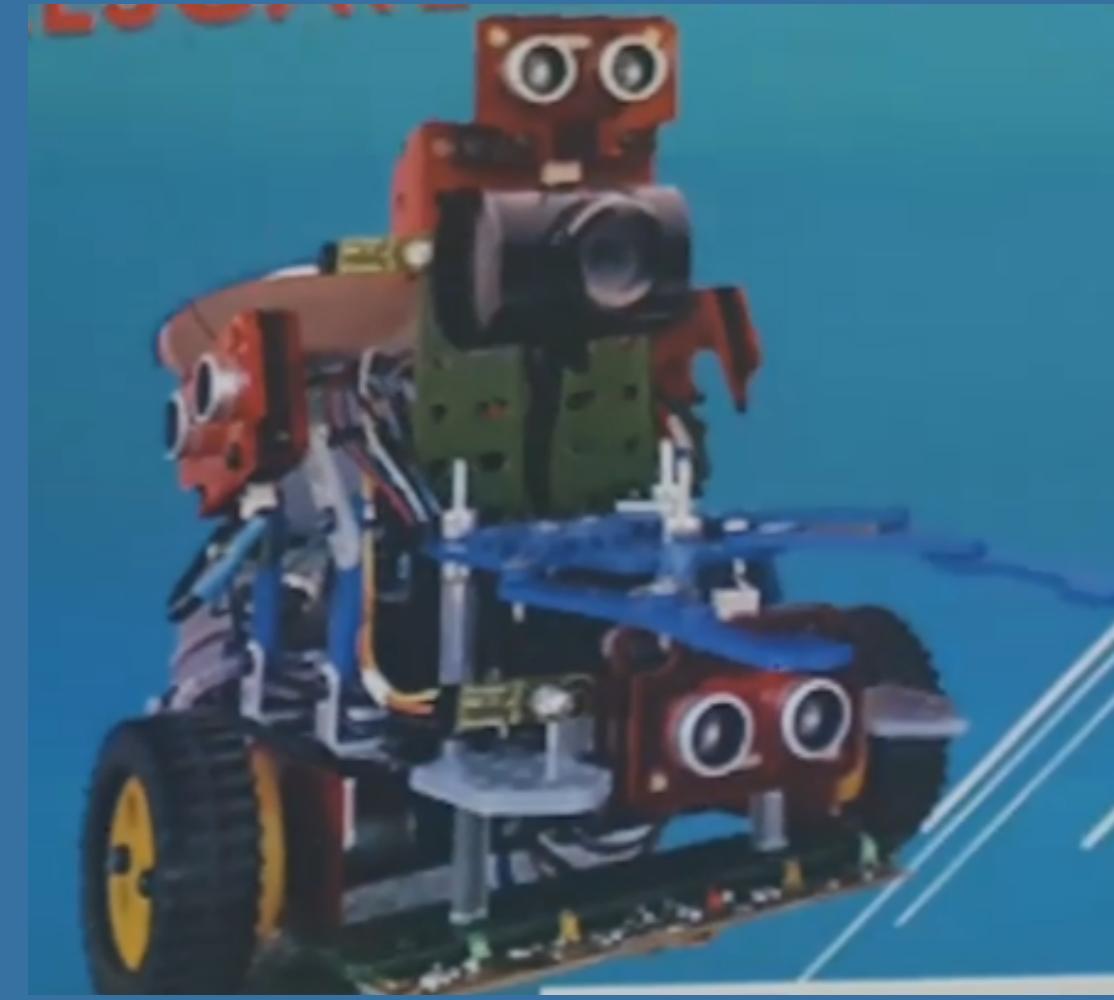
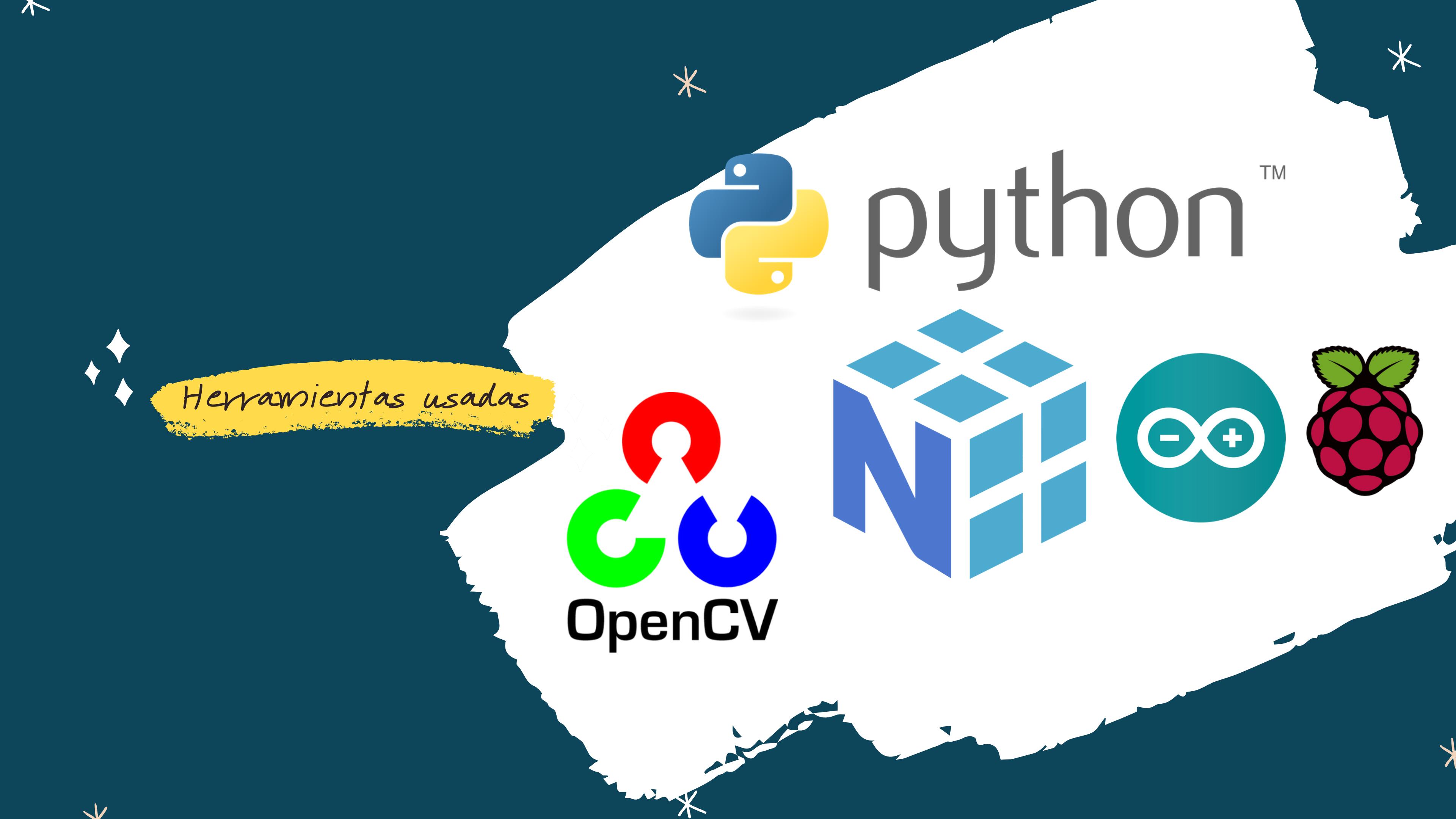


# Houdini

By: Félix Humberto Carabajal





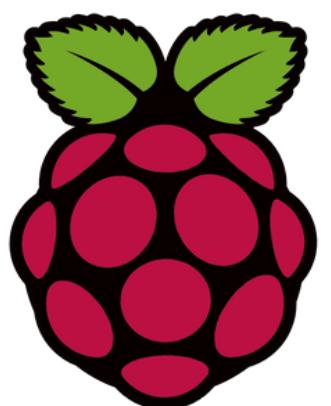
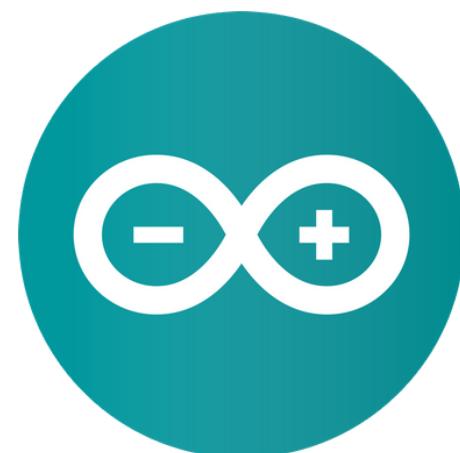
# python™



Herramientas usadas



OpenCV

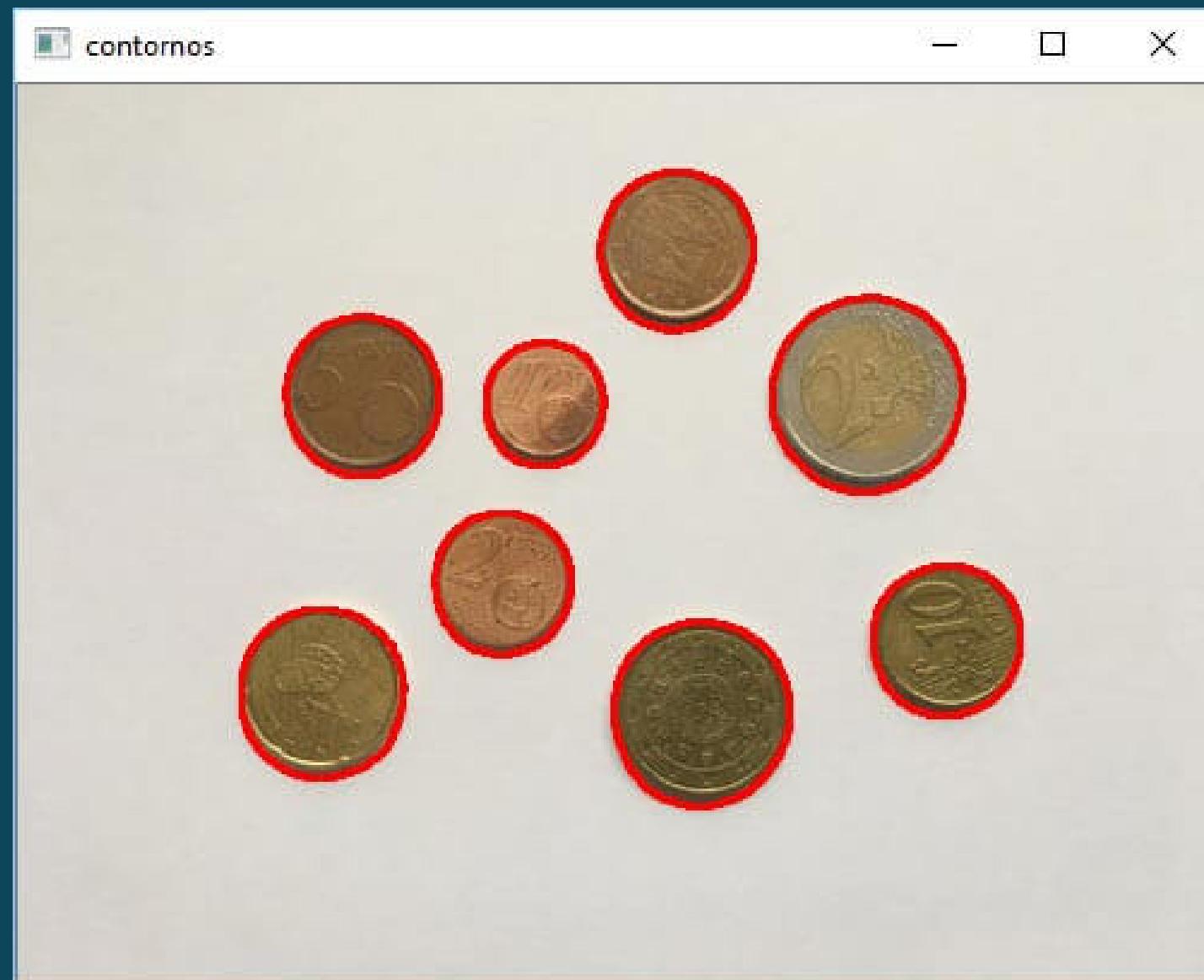


# Procedimiento



Instalando...

# Detección de colores y contornos predefinidos



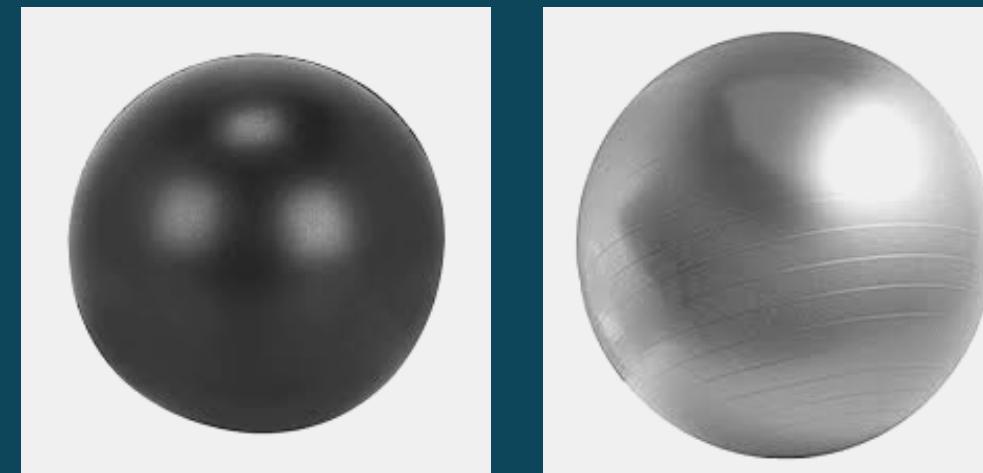
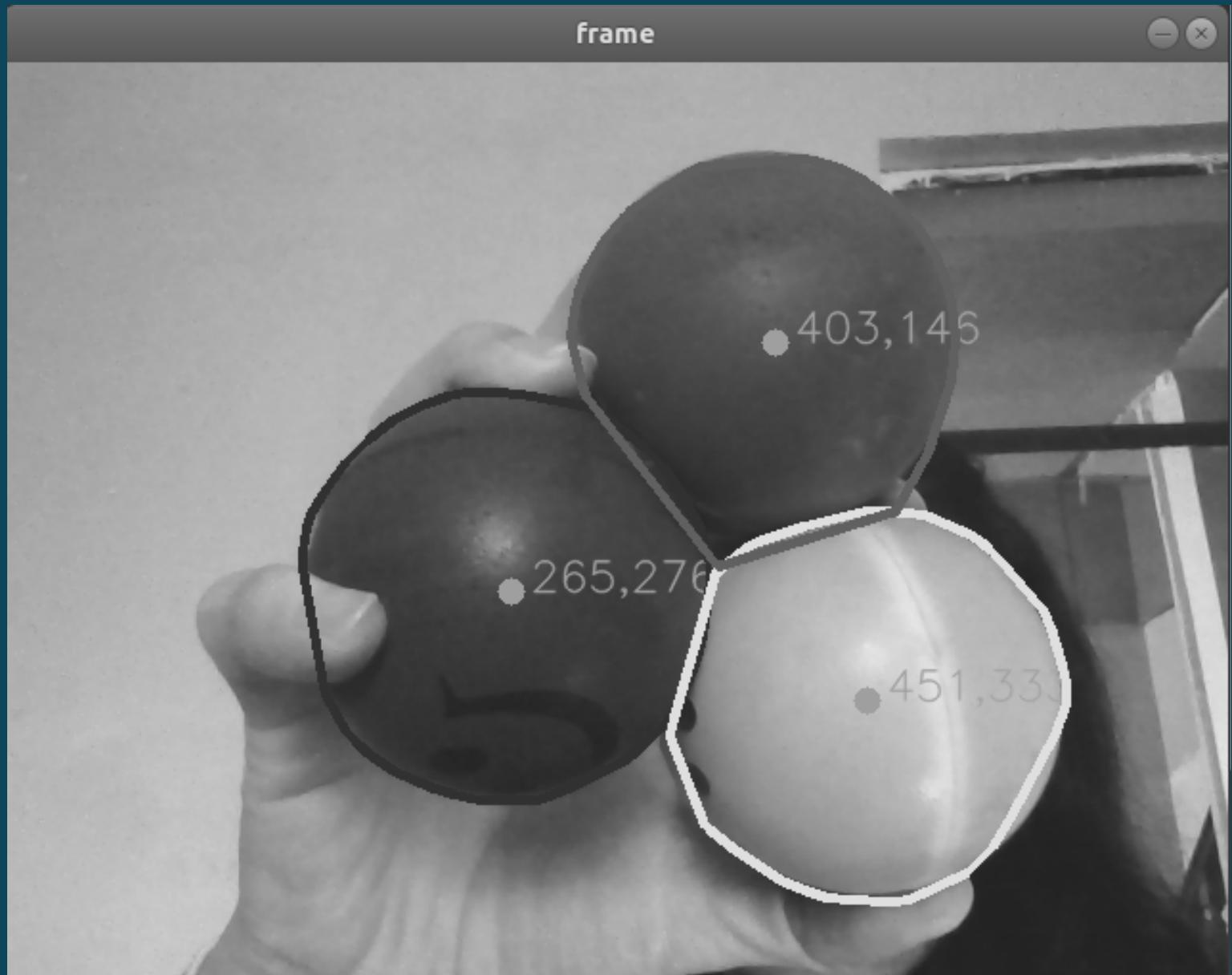
# Problemas



# Colores de las pelotas



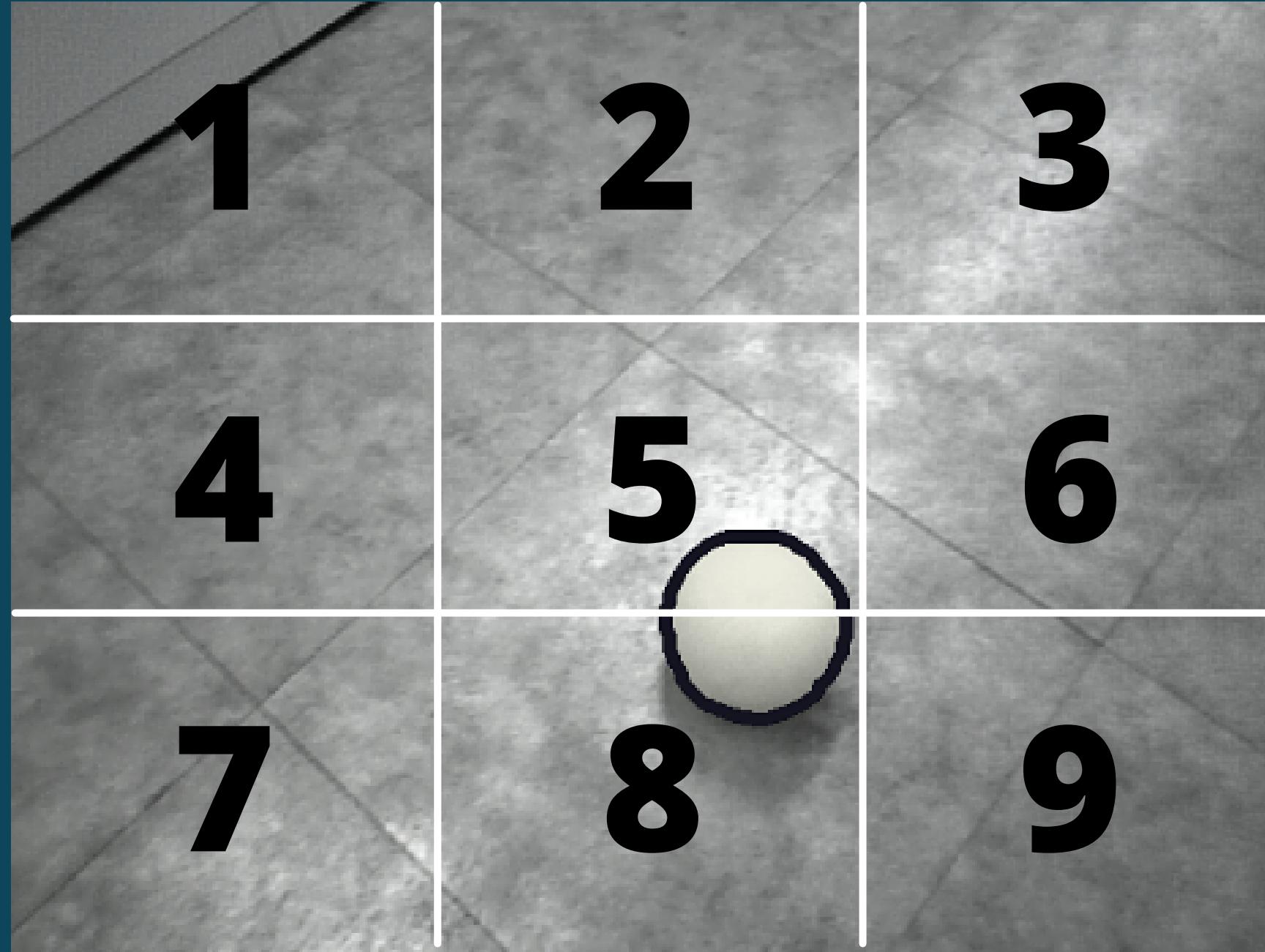
# Funcionamiento de OpenCv



# Pov: Vision de Houdini



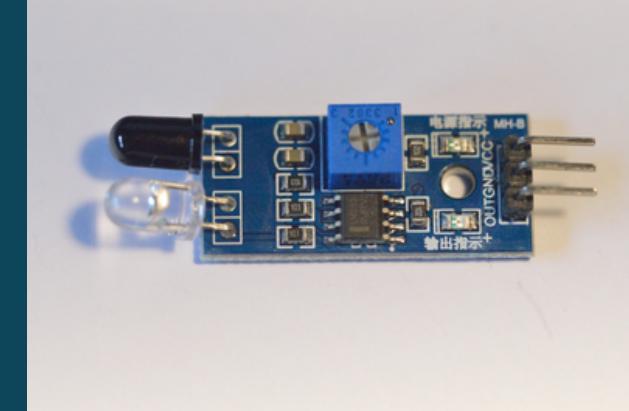
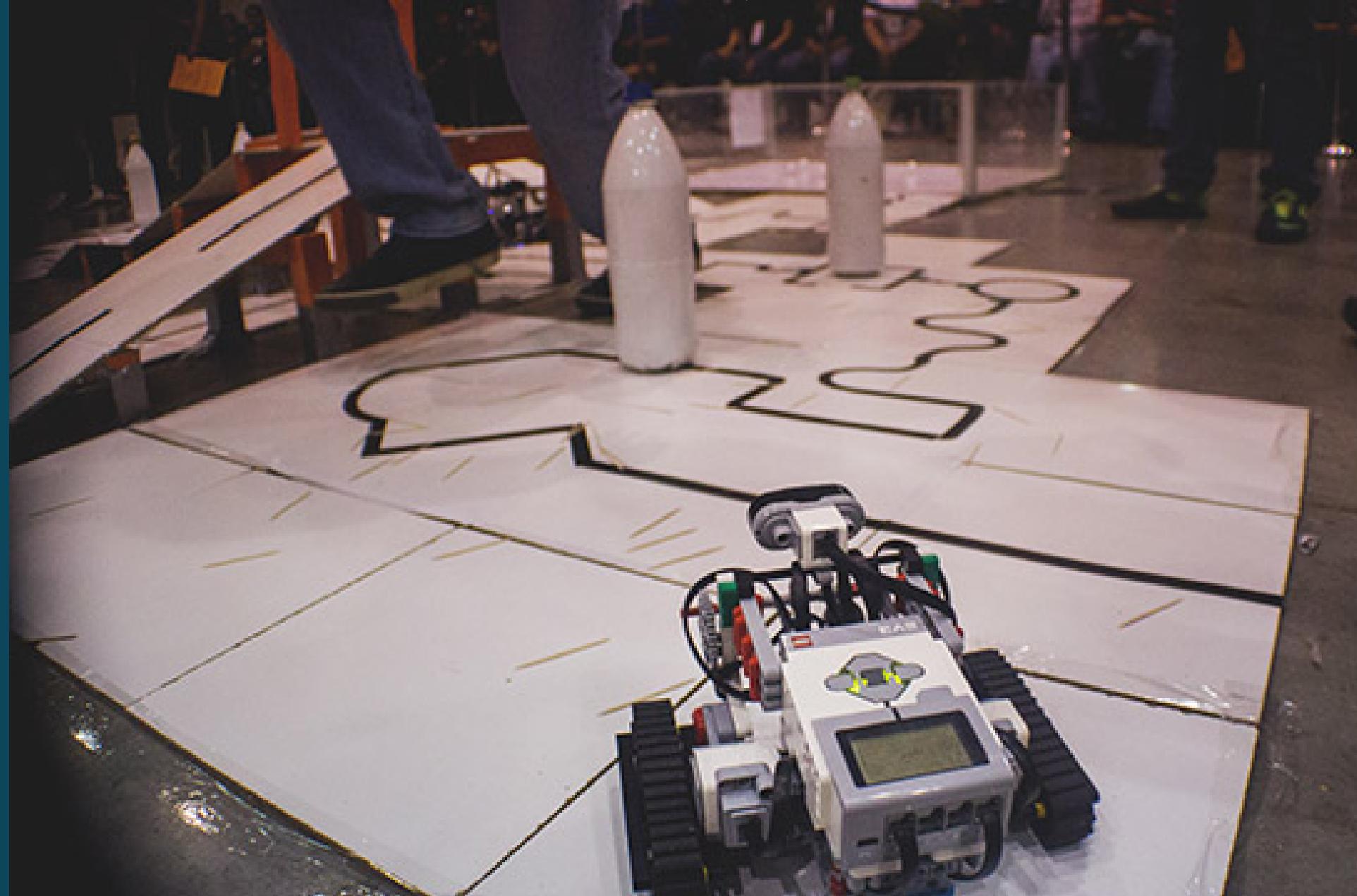
# Pov: Vision de Houdini



1. Delante, Izquierda, Lejos.
2. Delante, Centro, Lejos.
3. Delante, Derecho, Lejos.
4. Delante, Izquierda, Cerca.
5. Delante, Centro, Cerca.
6. Delante, Derecha, Cerca.
7. Delante, Izquierda, Muy Cerca.
8. Delante, Centro, Muy Cerca.
9. Delante, Derecha, Muy Cerca.

Serial --> Arduino

# Hardware Arduino



Sensor de Linea - Binario

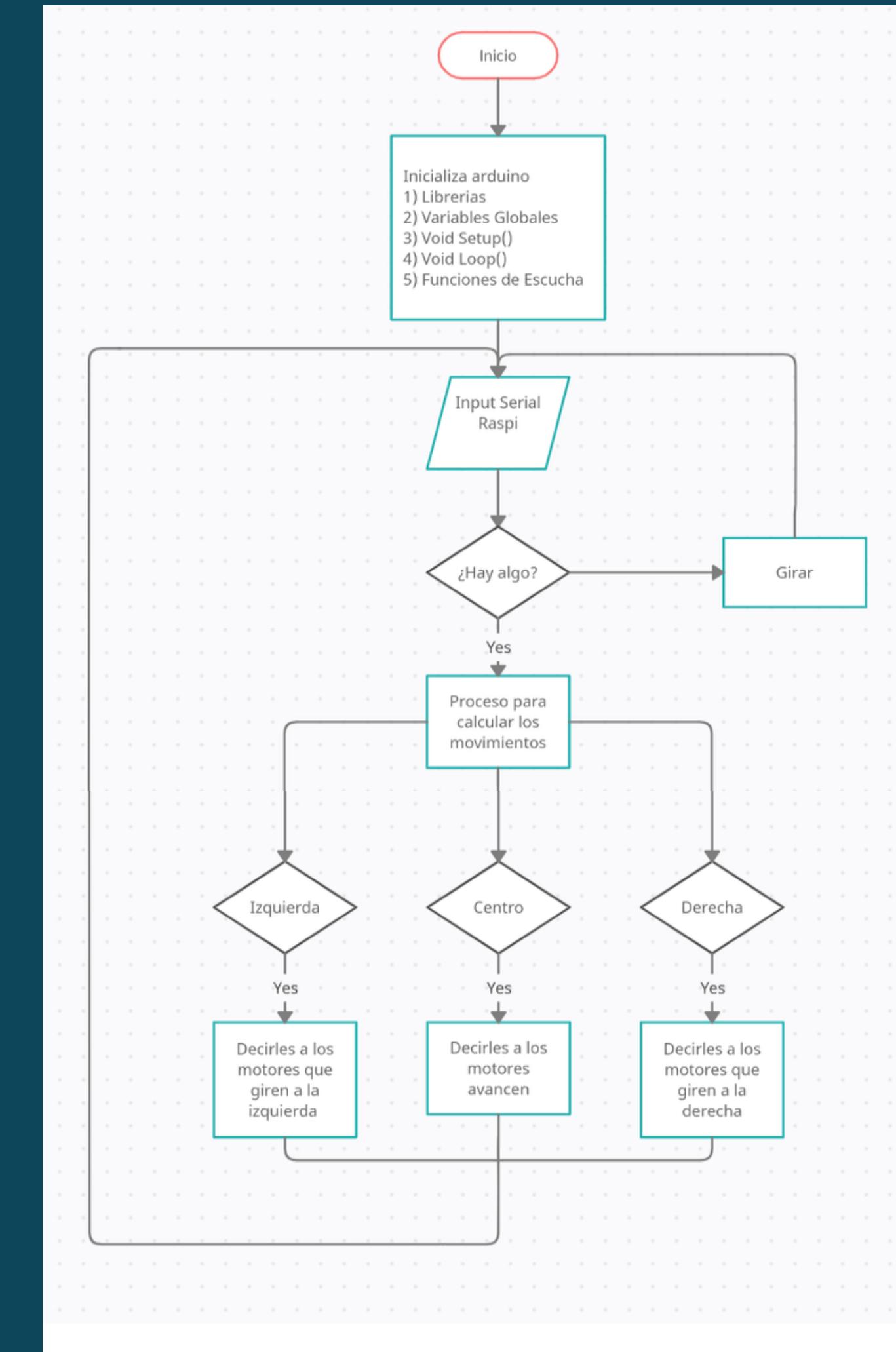
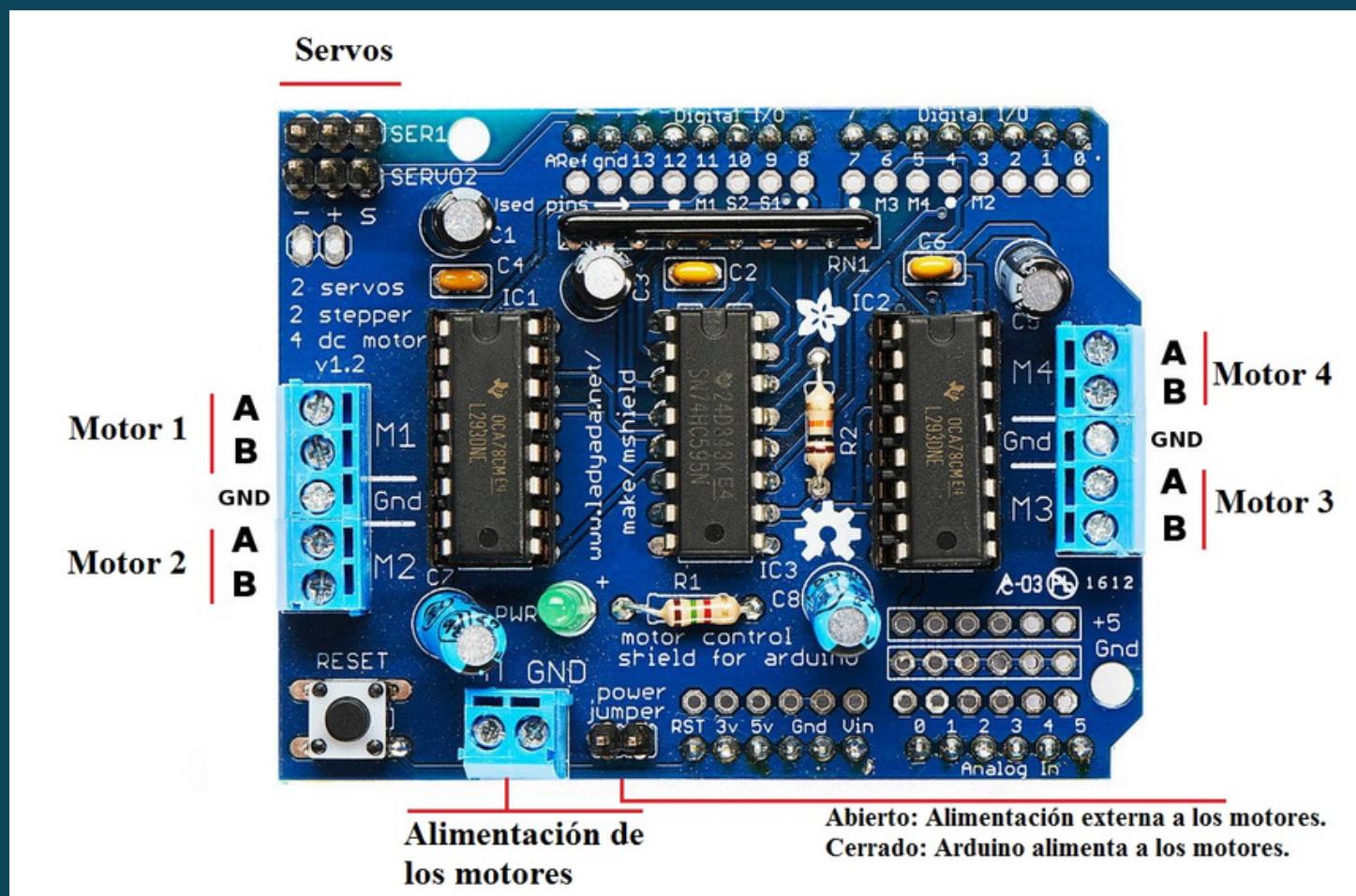


Ultrasonido-Float



Webcam - RGB

# Flow Chart



# Preguntas