

# WolfieWeb Robotics Academy

## Tutorial 03 — Line Following (IR Sensors + PID)

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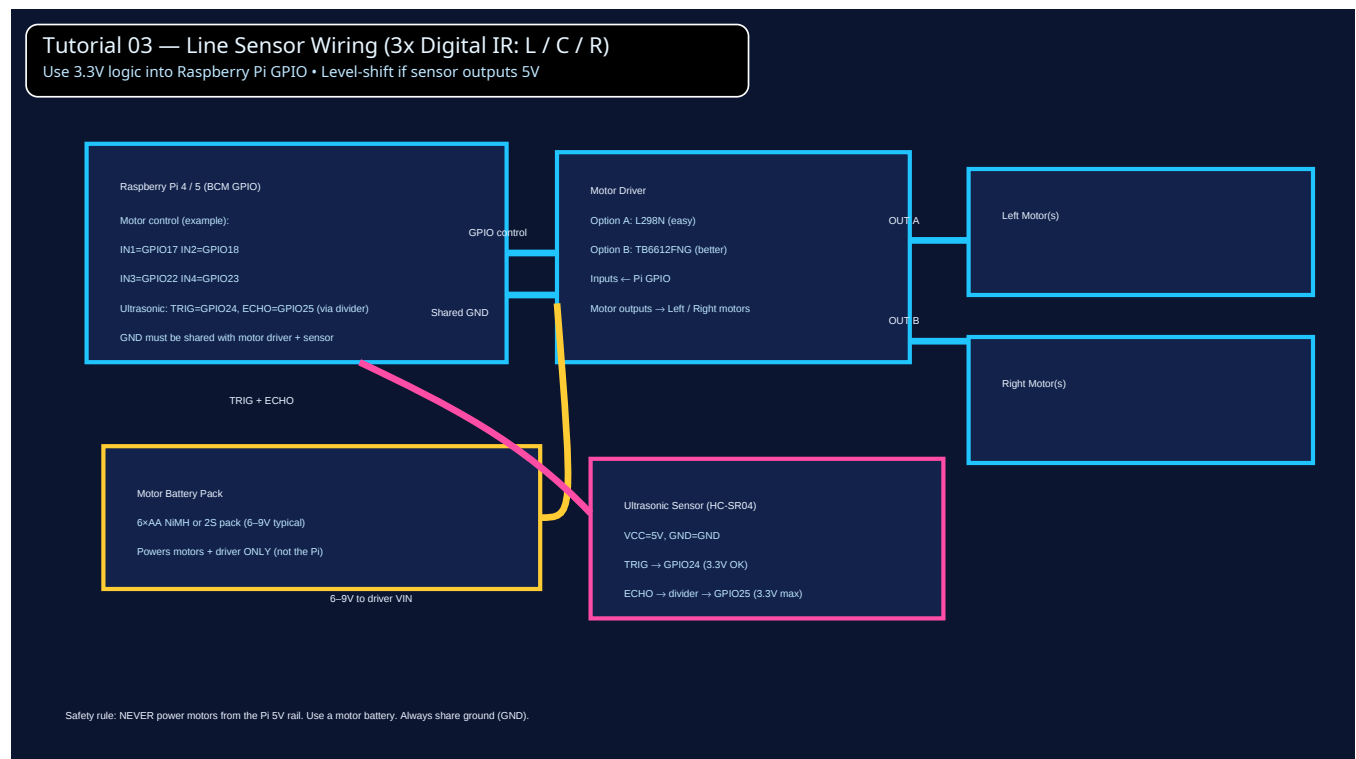
Goal: upgrade your Raspberry Pi robot car to follow a black tape line using IR reflectance sensors and a stable PID control loop.

### **Wiring safety**

Raspberry Pi GPIO is 3.3V-only. If your sensor outputs 5V logic, use a level shifter or voltage divider before connecting to GPIO.

# Wiring Diagram — 3x Digital IR Sensors (L / C / R)

File: line\_sensor\_wiring.svg (labeled for Tutorial 03)



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