Elegoo Car Kit

Add traffic light
recognition capabilities
to Elegoo UNO R3
driven car robot
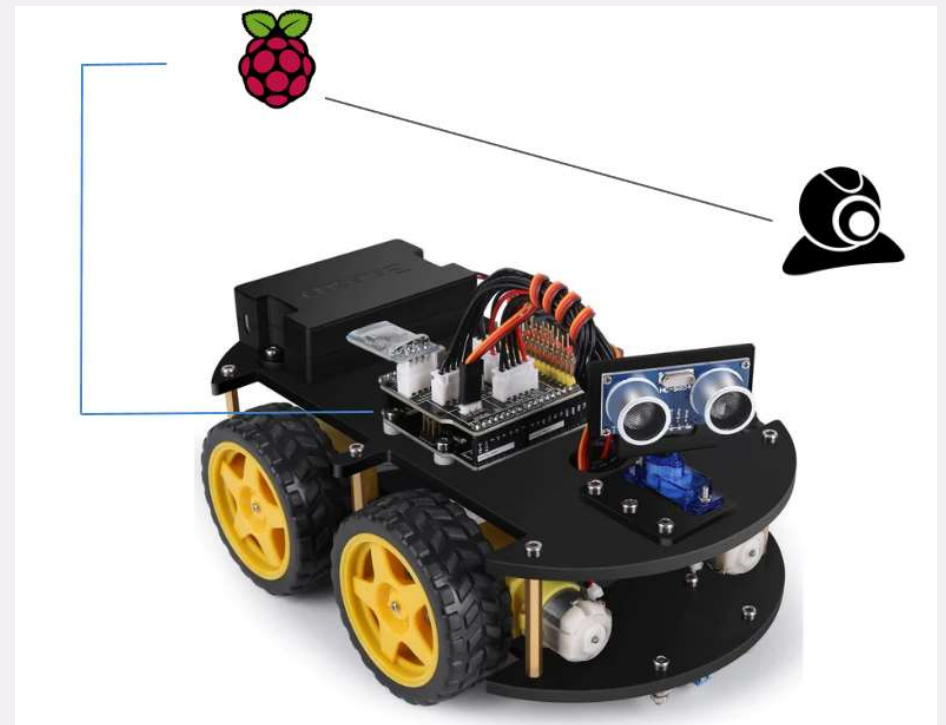
High Level Idea

- Ultra-sonar "eyes" to detect near obstacles

- Can change direction when is about to collide something

- It cannot actually see, then it could jump a red light.

High Level Idea

- Give eyes to see traffic lights

- Raspberry Pi 4 is the brain

How to implement

- Train TensorFlow model to recognize traffic light into an image

- Convert to TensorFlow Lite model in order to embed on Raspberry PI
  https://www.tensorflow.org/lite?hl=it

- Capture images from webcam

- Evaluate seen image

- Send command to arduino board [STOP,START]

- Arduino send impulses to wheels motor controller