INTELLIGENT ROBOT CAR THAT TRANSFERS SPEED AND ACCELERATION DATA WIRELESS "LIVE" WITH A GRAPHIC PRESENTATION - LABORATORY TOOL. Seeing our poor experimental background in motion science as a physicist, I wanted to take advantage of free software in conjunction with the arduino, making a build with countless extensions. The original concept is a standalone car that transmits wireless rotation per minute (RPM) and speed (trying acceleration also) to graphics on our PC. Autonomous means that it either avoids obstacles or follows a single line or follows a virtual path BUT TRANSMIT DATA TO PC.

Hardware:

1. <https://www.waveshare.com/product/robotics/alphabot/alphabot-robot.htm> (or <https://www.waveshare.com/alphabot-ar-basic.htm?___SID=U> )
2. <https://www.aliexpress.com/w/wholesale-hc05-bluetooth.html>
3. <https://www.indiamart.com/proddetail/ultrasonic-sensor-hc-sr04-module-for-arduino-18101779448.html>
4. 2 batteries: <https://grobotronics.com/ncr18650b-3350mah-panasonic.html>
5. <https://www.waveshare.com/uno-plus.htm>
6. Your pc.

Software:

1. arduino ide
2. processing ide (free download-open software from: <https://processing.org/> )



