Python Programming

dexterindustries.com/GoPiGo/programming__trashed/python-programming-for-the-raspberry-pi-gopigo/

An Introduction Python Programming with the GoPiGo

Dexter Industries has an extensive Python Programming language set of examples for the GoPiGo. These are all up on Github. If you are familiar with Python, these will be easy to start with and follow.

A First Program with Python and The GoPiGo

If you're just starting out, this video is very helpful to get started with the GoPiGo.

A Guided Tutorial

Pythonprogramming.net has done an extensive set of tutorials on how to program with the GoPiGo. These include a fun and thorough Youtube series here.

The different written python tutorials for the GoPiGo are below. These include further code examples and correspond to the different Youtube videos above.

These are very well written and thought out tutorials.

Python Programming API Functions:

Below is a more detailed description of the functions available with the GoPiGo with Python along with the usage and examples.

Click on the individual links below for more detail on their usage.

Motor control functions:

- **fwd()**: Move the GoPiGo forward with PID (better control)
- **motor_fwd()**: Move the GoPiGo forward without PID
- **bwd()**: Move the GoPiGo back with PID (better control)
- **motor_bwd()**: Move the GoPiGo back without PID

- **left()**: Turn GoPiGo Left slow (one motor off, better control)
- **left_rot()**: Rotate GoPiGo left in same position (both motors moving in the opposite direction)
- **right()**: Turn GoPiGo right slow (one motor off, better control)
- **right_rot()**: Rotate GoPiGo right in same position both motors moving in the opposite direction)
- **stop()**: Stop the GoPiGo

Motor speed Functions:

Encoder Functions:

Ultrasonic ranger read:

- **us_dist()**: Read distance from the ultrasonic sensor

LED control:

- **led_on()**: Turn LED on
- **led_off()**: Turn LED off

Servo control:

Status from the GoPiGo:

Have a question or a suggestion? Go check out our support page here or post it on the forums here.