# DPRG RBNV Chat Record for 6/29/2021

### Ray

8:16 PM

So you are not going to sell it for \$80...

### Doug P.

8:29 PM

Must read blog entry that discusses clearly the possible pitfalls of using an interrupt:

http://rcarduino.blogspot.com/2012/04/how-to-read-multiple-rc-channels-draft.html

# Doug P.

8:31 PM

A really nice ultrasonic sensor (better than HC-SR04) https://wiki.seeedstudio.com/Grove-

# <u>Ultrasonic\_Ranger/</u>

# Ray

9:02 PM

deux ex machina interupts ballistic behaviors...

### Doug P.

9:06 PM

Servo vs Ballistic Behaviors

- · Servo behavior has a feedback loop
  - Eg: light-positioning behavior
  - Never completes
- · Ballistic behavior, once triggered continues to completion without any sensing
  - Eg: Escape behavior
    - 1. Back up a preset distance
    - 2. Spin a preset number of degrees
    - 3. Move forward a preset distance Use with caution due to sequential nature
  - Try to solve with servo behavior first

### Harold Pulcher

9:08 PM

what I really wanna know is: Can doug get any more icons on his desktop? :)

#### Doug P.

9:09 PM

see slide 34 for definition between a servo and a ballistic behaviors of MIT lecture:

http://courses.csail.mit.edu/6.189/fall2005/pub/lectures/Releases/2005 09 08 lecture2.pdf

# Kelly Taylor

9:11 PM

in ROS terms NZ has a Mission with updates that may trigger an action (topic ) when a sensor gets a hit, and a subscriber triggers the stop.

### Ian Potter

9:33 PM

this is fascinating, but i've got to go.

#### Kelly Taylor

9:39 PM

cattern.com

#### Chris N

9:40 PM

I've got to call it a day!

Carl Ott

9:42 PM

for DPRG: "Ballistic" the new "PID" discussion prompt...

next up - DPRG debate on "Ballistic PID Loops"

Pat Caron

9:48 PM

Good night guys, great discussion!

Robots New Zealand

9:55 PM

https://wiki.seeedstudio.com/Grove-Ultrasonic\_Ranger/

Doug P.

9:55 PM

pololu part 4071 - IR sensor that is discussed in RBNV meeting

Kelly Taylor

9:56 PM

https://www.youtube.com/watch?v=BS-JdlPjSGE

Kelly Taylor

9:57 PM

a 3 year old video of version 1 of my rover. https://www.youtube.com/watch?v=fEO6gOejG5w

Robots New Zealand

9:58 PM

Thanks Kelly!

Kelly Taylor

10:02 PM

a camera hood works well

Kelly Taylor

10:13 PM

good night. I got to go.

Doug P.

10:22 PM

i2cdriver (bus pirate like tool with screen) from Adafruit part 4267 https://www.adafruit.com/product/4267