

DPRG RBNV Chat Record – 8/3/2021

Carl Ott
7:37 PM

~7:35 - Ray showing his Compass sensor - which uses a camera and computer vision on a physical compass

Carl Ott
7:41 PM

Ray listed this as a good site for ESP32-CAM projects... <https://randomnerdtutorials.com/projects-esp32-cam/>

~ 7:41 Ray describing results using GPS RTK / Ublox modules (MP8?)

Carl Ott
7:47 PM

~7:45 - Ted - showing OpenMV cone detection - found the "Lab" color space - doesn't matter if is light or dark - is just looking at the color part of the image - "Lab" doesn't really care. Verifies well indoors when fairly dark, and outside when bright...

Carl Ott
7:52 PM

~ 7:52 Pat - working on ESP based kill-switch

ESP8266

Doug P.
7:53 PM

Ted, you might find uPyLoader useful.

Ray
7:55 PM

<https://randomnerdtutorials.com/esp32-cam-opencv-is-color-detection-tracking/>

Carl Ott
7:55 PM

Pat - was also discussing challenges to get & address multiple I2C devices on the same bus

Ray
7:55 PM

SparkFun GPS-RTK Board - NEO-M8P-2

Carl Ott
8:13 PM

~8:05 - Franklin showing progress on his mBot (Arduino uno level processor) programmed using Scratch

Carl Ott
8:20 PM

~8:15 - discussed logistics for 21 Aug RoboColumbus contest

Carl Ott
8:30 PM

Details for 21 Aug RoboColumbus event <https://www.dprg.org/robocolumbus-competition-2021/>

Carl Ott
8:42 PM

~8:38 - Carl showed progress on Duct Tape and Bailing Wire rover - IMU based heading loop enabling driving straight

~8:42 - Doug D - showing progress on parts for his telepresence robot

Steve Edwards

8:45 PM

<https://meet.google.com/hey-jxuo-esf>

Doug Dodgen

8:45 PM

<https://www.youtube.com/watch?v=JPPTRj0KWbg> motor controller

Steve Edwards

8:45 PM

<https://imgur.com/a/igctvtd>

Carl Ott

8:48 PM

~8:45 Steve showed a sneak preview of the contest course layout

~8:48 - Harold talking about ROS / Docker issues - problems & troubleshooting...

Jim F - CalgaryAB

8:52 PM

Harold, Look at what we learned through the process.

Harold Pulcher

8:54 PM

yeah, we have learned a ton!

Carl Ott

8:54 PM

~8:54 - John G update on his custom motor controller - added a low pass filter / shutting the motor off when it stalls so it doesn't break itself...

Jim F - CalgaryAB

8:59 PM

@Carl what is the top speed of Your robot ?

Carl Ott

8:59 PM

@jim I dunno - much higher than we can use

we'll likely run it relatively slow

Jim F - CalgaryAB

9:00 PM

@carl do you have any odometer?

Carl Ott

9:00 PM

nope - no odometer

just a speed estimate (from control value) and a stopwatch -> estimate of distance

~9:00 - Scott G talking about his robots - will likely have 2 at the contest - one for the gold, and one more for amusing...

Carl Ott

9:05 PM

FWIW - Ted and Raj/Carl are using an OpenMV Cam H7 Plus <https://openmv.io/products/openmv-cam-h7-plus>

Ted explained earlier in this meeting about using the LAB color space - which let's you define a color and then is relatively invariant to brightness

Carl Ott

9:26 PM

~9:23 Doug D - looking at voice recognition. wants an offline platform to control his robot

Send a message to everyone