DPRG RBNV Chat Record – 9/19/23

Carl Ott 7:45 PM https://www.dprg.org/ https://www.youtube.com/@DPRGclips https://www.youtube.com/@DPRGclips/search?guery=david%20anderson Carl Ott 7:52 PM Background Reminder - sources for DPRG content & videos... https://www.dprg.org/ https://www.youtube.com/@DPRGclips https://www.youtube.com/@DPRGclips/sea rch?guery=david%20anderson Carl Ott 7:54 PM ~7:52pm Doug P shared an RGB-D 3D ToF Sensor Camera from DF Robot - https://www.dfrobot.com/product-2740.html Carl Ott 7:56 PM looks like a pretty good Wiki for that prodcut https://wiki.dfrobot.com/_SKU_SEN0583_RGB-D_Sensor_Camera and it's data sheet https://github.com/DFRobotdl/DFROBOTDL/blob/main/SEN0583/DataSheet.pdf Carl Ott 7:57 PM It does use Python - according to the Wiki: python SDK This is a SDK based on Python3. MS-A075V opens its http interface, we can get its origin data (Depth map, ir map, rgb map) through http request. To help user understand the struct of data package and the relevant logic of decoding, we provide decoding related functions that encapsulate http requests and native data, based on which users can do custom development. Get SDK:Click to download Method : Install jupyter, connect to the TOF module. Carl Ott 7:58 PM ~7:57pm Doug P showed a decent tutorial from Random Nerds Doug Paradis 7:58 PM https://randomnerdtutorials.com/arduino-free-guides-sensors-modules/ Carl Ott 7:59 PM that was 39 Free Guides for Sensors and Modules Carl Ott 8:00 PM Doug also shared a great resource to find open source related projects... https://awesomeopensource.com/projects Carl Ott 8:03 PM ~8:02pm - Doug P asked about some Amazon purchased N-Channel FETs, which seem to be a little out of spec. Using the output of GPIO to gate, on top - a small motor to a power supply. tried on a 5V processor but didn't work so well on a 3V processor. Ponder SomeMore 8:10 PM I don't know nuthin bout nuthin - will it help me out? Carl Ott 8:12 PM VFP30N06LE Ponder SomeMore 8:14 PM i feel about as smart a rubber duck. Carl Ott 8:14 PM me too - and losing more ground every day ... Ponder SomeMore 8:14 PM lol, losing too

Carl Ott 8:15 PM i hear speling is one f the virst things 2 go Ponder SomeMore 8:15 PM thaz wat dev sey not planning to present, but wondering if anyone else has seen the wifi object detection through walls? https://www.youtube.com/watch?v=pvqL3gqGDeM&t=2s Carl Ott 8:18 PM ~8:18pm - Donna gave feedback on the recent Seattle Robotics Society contest. Carl Ott 8:21 PM Held outdoors at a local elementary school. Ran ~ 4 contests, and a min-sumo contest. Perhaps 4 builders total - with lots of attendees who showed for a bit then left. Went well overall. Carl Ott 8:29 PM Karim - about "wifi object detection through walls" - I hadn't seen that particular example - but I could swear that there have been examples of that for some years now. I forget the details (refer to memory & cognitive & speling issues listed avove) - but I want to say there were even some projects based on open source firmware for common routers was it OpenWRT or MikroTik RouterOS? ed mart 8:31 PM Donna .. parts is Portland robotic club ??? Carl Ott 8:33 PM ~8:31pm - Donna asked about DPRG Plans for RoboColumbus. DPRG confirmed that it's tentatively scheduled for 7 or 8 Nov, or might move a week. The date still needs to be confirmed with our preferred venue host. Anyhow for SURE offsite participation is FULLY SUPPORTED - either via recording or even via live stream. Carl Ott 8:36 PM DPRG RoboColumbus 2023 - tentatively scheduled for 18 Nov: https://www.dprg.org/robocolumbus-2023/ Carl Ott 8:39 PM How to find orange cones? DPRG have had robots with PixieCam, Oak-D Lite, OpenMV H7. Some experimentation with ESP32-Cam (but those maybe tended to be too slow). Carl Ott 8:47 PM pat - I've muted you. That new / temp laptop of yours has microphone issues compared to your regular one... audio when you speak is a little garbled, and it was your feed that caused feedback for Harold and Tom... @Pat - it was you I muted... Ponder SomeMore 9:02 PM https://www.image-net.org/ Carl Ott 9:02 PM ~8:55 ~ 9:pm - discussed training orange cone detectors. Karim raised imagenet - a resource with a bunch of open source reference images... Mickey Dean 9:02 PM ves Doug gimme a sec Mickey Dean 9:06 PM to be honest I am having trouble getting setup tonight, but I will hope to have things tested for next week, I went with a wheelbarrow tire instead of fiddling with adhesive. Donna Smith - Seattle 9:06 PM I've got to take off. Good to see everyone, I will join again soon....

Carl Ott 9:06 PM Nice to see you Donna - catch you later... Mickey - sounds like progress. We'll send warm mic thoughts your way... ~9:07pm - Pat showeed his Carl Ott 9:07 PM hos outdoor rover - getting very nicely built-out. Ponder SomeMore 9:09 PM sintra Pat Caron 9:09 PM sintra board Expanded PVC sheet Ponder SomeMore 9:10 PM coroplast Carl Ott 9:12 PM Sintra - 12"x12" 1/4" 5mm thick about \$19 https://www.amazon.com/Expanded-Printable-Plastic-Displays-Waterproof/dp/B08N8GHXJL Ponder SomeMore 9:12 PM kydex ed mart 9:13 PM Kedex has many versions .. including food grade Carl Ott 9:14 PM Kydex 12"x 12" 2 pack for about \$14.88 https://www.amazon.com/KYDEX-Thermoform-Sheet-Texture-Thickness/dp/B09SVGBM5G Ponder SomeMore 9:15 PM acetal Carl Ott 9:15 PM Delrin - Acetal sheet 6"x6" 1/2" chick is \$33 - good for gears and machining... https://www.amazon.com/BuyPlastic-Delrin-Acetal-Copolymer-Plastic/dp/B08M6F5T3C ed mart 9:17 PM Delrin takes high loads ... great for bushings. Carl Ott 9:17 PM in Dallas - Karim highly recommends https://www.alliedplasticsupply.com/ as a source for various types of plastics at great prices prices Doug Paradis 9:20 PM Metal Supermarkets for metal Carl Ott 9:20 PM Carbon Fiber Sheet - many thicknesses available - but guite pricey - and also electrically conductive... https://www.amazon.com/FANCYWING-500X600X1-0MM-Laminate-Thickness-Surface/dp/B09WYDF7W7 Carl Ott 9:24 PM FYI - Also keep in mind the DPRG Mailing List - https://www.dprg.org/mail-list/ https://www.dprg.org/mail-list-archives/

Doug Paradis 9:25 PM Interesting surplus store: CDC hardware on Beltline in Richardson Ponder SomeMore 9:25 PM I wouldn't call CF conductor-like, in that you wouldn't use if for that purpose, but yeah, isolate or connect it to ground. For metals I tend to use <u>https://www.metals4u.com/metals4u-dallas/</u> Carl Ott

9:27 PM

Right - something else like metal sheet for a ground plan vs. CF. but - having not worked with CF for a while - sounds like you need an extra level of care to keep from shorting stuff out...