DPRG RBNV Chat Record – 1/30/2024

Mickey Dean 7:30 PM l do Mickey Dean 7:31 PM I apologize, we had a health emergency here and I checked out. Paul, send it to Tinman on Discord Mickey Dean 7:39 PM Paul, I sent you my email info on Discord. Paul Bouchier 7:42 PM Mike W described current progress. Paul Bouchier 7:46 PM Three TOF sensors on a block providing 180 degrees of view from sensors. Aggregating sensor data in an Arduino. RPi Pico running Arduino code reads TOF sensors and BN0055 and sends it all up to ROS2. Paul Bouchier 7:50 PM Mike has openMV camera mounted & will mount TOF sensors near it. Paul Bouchier 7:52 PM Mike can run ROS code & drive the robot & get the sensors into ROS. Paul Bouchier 7:53 PM USB serial from RPi to microcontrollers Mickey Dean 8:03 PM I am not getting any. Carl Ott 8:03 PM Hi guys - I'm driving back home from the Makerspace / Listening in but not able to talk... Mickey Dean 8:03 PM Paul, I am not getting any. Tom C - Hamilton, ON 8:04 PM I am not getting email messages either. Mickey Dean 8:04 PM Paul, I sent you my email in Discord DM Mickey Dean 8:06 PM DEFINITELY Mickey Dean 8:09 PM waveshare Mickey Dean 8:10 PM 3D printer will be an issue for me in the class, and being in VA is another issue. Paul Bouchier 8:11 PM Doug Paradis is planning to hold a "build your own robot" class later in the year. Doug tries to provide a "good-ish" platform. Does not recommend the cheapest robot that was used in the last "build your first robot" course. Paul Bouchier 8:13 PM

Doug doesn't like the yellow TT motors. Paul Bouchier 8:18 PM Digikey has 663 RPi5's with 8GB available now for around \$90 including tax. Big Pi5 issue is GPIOs are broken because they put all the GPIO onto an auxiliary microcontroller, so all the GPI libraries are broken. Mickey Dean 8:20 PM doug NVMe Pat C 8:22 PM I2C Clock Stretching (software I2C) https://www.mcgurrin.info/robots/723/ https://aithub.com/fivdi/i2cbus/blob/master/doc/raspberry-pi-software-i2c.md Rav Casler 8:22 PM micro center has 25+ of rpi 4 4G for \$55 and 25+ rpi4 8G for \$75. Paul Bouchier 8:39 PM Paul showed scripted_robot_driver just before this timestamp. Ray Casler 8:39 PM and Carl is here also ... Carl Ott 8:41 PM I have a brief update and couple questions for after recording. You 8:42 PM Good Raspberry Pi author and books: Harry Fairhead (many books) link to my favorite: https://www.amazon.com/gp/product/B0CS2LRPSS/ref=kinw_myk_ro_title Paul Bouchier 8:50 PM Harold showed a seesaw dial interface controlling a menuing system on a small LCD. Menuing system SW is KrisKasprzak / Adafruit_ST7735 on GitHub Paul Bouchier 9:10 PM Discussion of surfacing sensor data from microcontrollers into ROS. List all ros2 message types with ros2 interface list. Show the fields in a particular message with ros2 interface show nav_msgs/msg/Odometry. Paul Bouchier 9:11 PM Tom showed his sensor test platform, evolved. Carl Ott 9:36 PM https://accounts.dallasmakerspace.org/member_count.php?total Carl Ott 9:50 PM That prior link lists current DMS membership. And this link shows room size in square footage and people (limited by fire marshall) https://dallasmakerspace.org/wiki/Rooms_Guide_page Jack 9:52 PM I'm going to go :) Tom C - Hamilton, ON 9:54 PM Thought you might like to know about equivalent services in Ontario, hosted at most Libraries throughout the province. Here's the one I have used: https://www.hpl.ca/makerspaces ed mart 9:55 PM Ray running on the horse apple party , has my full support !! Carl Ott 9:55 PM

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You

9:56 PM

Minutes for Annual meeting on 2020: <u>https://www.dprg.org/wp-content/uploads/2020/02/Annual-Meeting-2020.pdf</u> Carl Ott

10:02 PM

Tom, that's cool. We have a growing number of library-based spaces here. I just visited the one for my city. It's crazy because I can e.g. submit 3D prints to my library makerspace, they have a paid person who prints and monitors, then emails you when it's ready - as a citizen we just have to pay for filament and pick 'em up.