DPRG RBNV Chat Record – 8/17/2021

Carl Ott 7:39 PM Getting excited for our in-person contest coming up on 21 Aug in Dallas and Virtual... details here 21 August "RoboColumbus-Plus" Outdoor Rover Competition https://www.dprg.org/robocolumbuscompetition-2021/ https://www.meetup.com/Build-More-Robots-with-DPRG/events/279974940/ Register Here https://www.eventcreate.com/e/dprg-robocolumbus-2021 ~7:38 - Doug D - brief update ... Chris N 7:41 PM for Ryobi: https://www.amazon.com/Wheels-Adaptor-Battery-Connector-Robotics/dp/B0977YGTCT/ref=sr 1 5?crid=O2KGALIN4FQV&dchild=1&keywords=ryobi+battery+adapte r&qid=1629247213&sprefix=ryobi+battery+%2Caps%2C218&sr=8-5 Carl Ott 7:41 PM Thanks Chris - nice adapter to use standard Ryobi battery on robot projects... Carl Ott 7:43 PM Doug D was showing battery adapters & wheels for his telepresence robot & mentioned a deal for Ryobi Direct - ongoing right now Carl Ott 7:44 PM ~7:43 Pat - week chock full of robot work... Doug Dodgen 7:46 PM Ryobi battery adapter from Amazon Power Wheels Adaptor for Ryobi 18V One+ P108 P107 P102 Battery Dock Power Connector RC Toy & Car, e-Bike 12 Gauge Robotics (with Wire Terminals) Carl Ott 7:51 PM ~7:51 - Doug D showed a GPS module he's procured - recommended on DroneBot Carl Ott 7:53 PM ~7:53 Ted M - update on his RoboColumbus rover - added bumper switch - showed video Doug Dodgen 7:53 PM DroneBot blog entry on GPS = https://dronebotworkshop.com/using-gps-modules/ Carl Ott 7:58 PM ~7:57 - Doug P - update on his RoboColumbus rover - gave a presentation / videos showing progress Carl Ott 7:59 PM steering wheels tracking the cone / found via CV / PlxyCam Doug Dodgen 8:00 PM

The Ryobi Online store that I used was https://www.ryobitoolsoutlet.shop/power-tool-t12 Carl Ott 8:00 PM showed Ardu Pilot sending info to the Mega at about 5 Hz - waypoint distance, target bearing and several others Doug Dodgen 8:01 PM Still waiting to see if it is a legitimate store since it made me use PayPal to checkout Carl Ott 8:13 PM ~8:13 - Dave Ackley - talking about current control for motor Carl Ott 8:15 PM MP6522 - interesting part \$2.70 at Mouser Dave Ackley 8:15 PM I just came across the following article about a motor driver that includes the ability to limit the current. I remember that someone was asking about something like that at our VRBNO, but I couldn't remember who, do you? This MP6522 looks like an interesting part and it's \$2.78 each at Mouser, unfortunately it isn't yet in stock (expected 3/28/2022). https://www.electronicdesign.com/powermanagement/whitepaper/21168632/monolithic-power-systems-optimize-dc-motor-drivers-with-currentregulation Carl Ott 8:18 PM ~8:16 - John G gave an update on his spider leg controller. Also progress on a PID loop Carl Ott 8:20 PM ~8:19 - Doug P showing one of the LM298 driver boards with built-in current sense Mollv X. GvH 8:21 PM Put your hand behind the piece so the camera will focus on it. :) LOL!! Carl Ott 8:23 PM 8:21 - Dave A - showed his Chassis dynamometer - used to measure robot wheel rotation / maybe also tune PID loop Carl Ott 8:26 PM https://www.eventcreate.com/e/dprg-robocolumbus-2021 register for this Saturday's event Carl Ott 8:28 PM

please fill out this form

To RSVP - * either fill out this simple form <u>https://forms.gle/7yrGmAewZUeELwUk9</u> * or send an email to secretary@dprg.org with --- your name & number of people attending with you --- your email --- indicate if

you will join in person or via Google Meet --- indicate if you will compete (and with how many robots) --indicate if you will just attend to socialize and cheer on contestants Ian Potter 8:31 PM i've made some kind of grievous error, I'm going to have to log out and back in. Mollv X. GvH 8:33 PM Carl what is the deadline to fill out the Google Form for either onsite or online? Carl Ott 8:35 PM Molly - no real deadline - we won't turn people away - but the more accurate the headcount the closer we'll get on food ;-) Molly X. GvH 8:35 PM will you go livestream on discord as well? Get Ron Dagdag out there too! :) Molly X. GvH 8:37 PM Yes Harold give him some s#@\$t ! LOL! Just kidding! :) Carl Ott 8:37 PM ~ 8:37 - Harold discussing progress on his robot - his ExoMy now rolling forward found a thing to link Trello board additions to a GitHub issue list Carl Ott 8:42 PM ~8:41 Karim seeking advice - Intel RealSense how to extract features to be extracted - so that you can identify them and not run-into them... maybe from depth frame or ??? Ian Potter 9:09 PM time for me to go. see you all Saturday sometime. Carl Ott 9:11 PM ~ 9am discussion morphed from depth-sensing OpenCV to GPS- RTK positioning issues. Carl Ott 9:13 PM ~9:11 John K - discussing the stock Pan/Tilt mechanism for PixieCam - lots of little parts - hard to assemble Carl Ott 9:14 PM https://smile.amazon.com/ANCIRS-Stainless-4-Claw-Grabber-Objects/dp/B08QVF47LV/ref=sr_1_4_sspa?dchild=1&keywords=screw+grabber&qid=1629252879&sr=8-4spons&psc=1&spLa=ZW5jcnlwdGVkUXVhbGlmaWVyPUEyMUdJVkpaSUpUMFNOJmVuY3J5cHRIZElkPUEw MjQ4NzY3WkFYWlg3M0NYQUomZW5jcnlwdGVkQWRJZD1BMDkwOTg0NDNHWE1ITkZJU0I5S1Umd2lkZ 2V0TmFtZT1zcF9hdGYmYWN0aW9uPWNsaWNrUmVkaXJIY3QmZG9Ob3RMb2dDbGljaz10cnVl ANCIRS 2 Pack Stainless Steel 4-Claw Pick up Tool for Small Parts Pickup, 4 Prongs Grabber for Tiny Objects in Home, Office - IC Chip, Electronic Components, Nails Clamping-Bronze

Ted Meyers

9:16 PM Got to go, see you all Saturday! Molly X. GvH 9:20 PM

I'm good! It's been great listening and trying to map out some ideas that I could potentially incorporate into an AR/VR - Mixed Reality project I'm working on. I'm just a newbie on the robotics side too so there's that. :) You gents are the master robotics brains! :)

Carl Ott

9:21 PM

Molly - cool - hopefully you'll find some inspiration here. No need to be bashful - we have a few folk in DPRG interested in AR/VR/MR - so - open invitation to talk about your project if you like...

~9:16 Murray mentioning a good book on Robotics - and also a behavior now working in his indoor rover Molly X. GvH

9:23 PM

:) Very Cool! Thank You I'll have more info. next time for sure!! :)

Carl Ott

9:25 PM

Refer to the mailing list - Murray will send a note about the book he found - it's pricey at ~\$50 for an ebook version - but is highly recommended...

Carl Ott 9:26 PM

The book discusses behavior--based robots

Carl Ott

9:29 PM

Murray - you mentioned a philosophical discussion of 'embodiement'. not sure exactly how this fits in- but I recommend a movie called Transcendence - Johnny Depp 'crosses the singularity' - it's pretty fun. this article seems to touch on it... <u>https://robohub.org/true-ai-or-clever-simulation-transcendence-movie-has-johnny-depp-crossing-the-singularity/</u>

Molly X. GvH 9:29 PM

So we kind of need a "David" boy like in the movie A.I.?!

Carl Ott

9:30 PM

yeah - or at least the mechanics behind David - how on earth did that robot last so many years and keep on ticking?

Molly X. GvH 9:31 PM

Exactly! ... or like Teddy his guardian

Carl Ott

9:32 PM

Just one strand of hair - bring back the human - but only for a day - that movie was fun..

Molly X. GvH

9:36 PM

...And then there are aliens that lives underneath the ocean. LOL!!

Carl Ott 9:39 PM To RSVP - * either fill out this simple form <u>https://forms.gle/7yrGmAewZUeELwUk9</u> * or send an email to secretary@dprg.org with --- your name & number of people attending with you --- your email --- indicate if you will join in person or via Google Meet --- indicate if you will compete (and with how many robots) --- indicate if you will just attend to socialize and cheer on contestants

Carl Ott 9:40 PM

From Murray - link to book

The Artificial Life Route to Artificial Intelligence Building Embodied, Situated Agents

https://www.kobo.com/nz/en/ebook/the-artificial-life-route-to-artificial-intelligence

and some other items from Murray

The Big Problem With Self-Driving Cars Is People And we'll go out of our way to make the problem worse <u>https://spectrum.ieee.org/the-big-problem-with-selfdriving-cars-is-people</u>

Bothersome Bystanders and Self Driving Cars https://rodneybrooks.com/bothersome-bystanders-and-

self-driving-cars/

John Gauthier 9:46 PM

Some have suggested that self-driving cars should come with an altruism setting to determine whether to choose between the driver's safety and pedestrian safety in certain situations.

Carl Ott 9:52 PM

John that's funny - I believe there is a very old ethical dilemma called the 'Trolley problem" <u>https://en.wikipedia.org/wiki/Trolley_problem</u>