DPRG 8/11/2020 RBNV Chat Record

00:38:30.345,00:38:33.345
T R: This kit looks interesting! New to the group and didn't want to
disrupt the convo, but if there's any kits you guys recommend for
newbies, I'd love to know. I am taking notes!

00:41:36.800,00:41:39.800
Doug Dodgen: I did the Osoyoo Robot Car from Amazon for $63

00:59:21.767,00:59:24.767
Randy Rosales: https://hackaday.com/2017/02/25/the-fab-lab-next-door-diy-
semiconductors/

00:59:34.822,00:59:37.822
Karim Virani: mechanical not good

01:00:12.512,01:00:15.512
Carl Ott: Randy - that's really funny!

01:00:33.357,01:00:36.357
Randy Rosales: Here is his site: hey kept goinghttp://sam.zeloof.xyz/

01:00:57.391,01:01:00.391
Carl Ott: I've heard of the garage bio-hackers - but a semiconductor fab
- that's funny!

01:07:32.264,01:07:35.264
Carl Ott: This store has some interesting options. I've been pleased with
the metal base version of the 4 wheel Mecanum kit, the version with the
Arduino Mega controller https://www.aliexpress.com/store/group/Robot-
Car/5248059_516101796.html

01:13:31.101,01:13:34.101
Harold Pulcher: that keyboard I was showing off...
https://www.redragonzone.com/products/redragon-k552-kumara-led-backlit-
mechanical-gaming-keyboard

01:24:10.091,01:24:13.091
Karim Virani: i think ROS excels mostly at harnessing the slave labor of
undergrad and graduate students

01:24:38.382,01:24:41.382
Chris N: That's funny!

01:25:59.217,01:26:02.217
Ray: sro4 2.0

01:39:43.208,01:39:46.208
T R: I have to dip, but thanks so much for your help and advice, all!

01:42:25.741,01:42:28.741

Karim Virani: Hey David, when I say 20mm accuracy - that's best case and what the tools are telling me - I have no way to verify that level of accuracy!!

01:44:58.982,01:45:01.982
Karim Virani: If you can't reinvent the wheel .. you don't really know how wheels work

01:45:35.345,01:45:38.345
David: LOL!

01:45:48.792,01:45:51.792
Carl Ott: nice - that's especially relevant for people like me- who apparently like to spent tons of time spinning their wheels...

01:46:21.936,01:46:24.936
Randy Rosales: This one? https://www.coppeliarobotics.com/

01:46:59.818,01:47:02.818
Carl Ott: About the CoppeliaSim:

01:47:17.273,01:47:20.273
Carl Ott: form the website: Create. Compose. Simulate. Any Robot.

01:47:20.899,01:47:23.899
Carl Ott: The robot simulator CoppeliaSim, with integrated development environment, is based on a distributed control architecture: each object/model can be individually controlled via an embedded script, a plugin, a ROS or BlueZero node, a remote API client, or a custom solution. This makes CoppeliaSim very versatile and ideal for multi-robot applications. Controllers can be written in C/C++, Python, Java, Lua, Matlab or Octave.

CoppeliaSim is used for fast algorithm development, factory automation simu

01:48:52.325,01:48:55.325
Randy Rosales: https://pybullet.org/wordpress/ has a few lower level robotics examples as well. Coppelia uses bullet as a core part of its ecosystem.

01:49:36.281,01:49:39.281
Randy Rosales: bullet is a rigid body dynamics simulator (set of ODE integrators and constraints)

01:50:20.158,01:50:23.158
Ray: the zed-f9p is supposed to be accurate to 10mm the neo-m8p-2 to 25mm ..

01:55:29.365,01:55:32.365
Murray Altheim: https://www.pololu.com/product/4115

01:55:44.475,01:55:47.475

Karim Virani: I'm using the f9p - with dual frequency antennas - so I often get more than 20 satellites in view. It'll only involve the best 12 matches (between rover and base) at any one time. but accuracy can dip quickly if the view becomes obstructed or it loses connection to the correction stream.

01:57:10.755,01:57:13.755
Chris N: Regarding the simulator: here is video of my simulated firefighting arena + robot. https://youtu.be/iacZwMNM9Io

01:57:24.858,01:57:27.858
Ray: would dramamine work?

02:00:23.360,02:00:26.360
Karim Virani: can't recommend drugs to solve problems - not to high school students

02:00:46.881,02:00:49.881
Karim Virani: i'd get in trouble

02:02:28.496,02:02:31.496
Carl Ott: Chris - that firefighting arena simulation is pretty cool !

02:02:42.555,02:02:45.555
Ray: what a time to stop popping opiods

02:03:21.902,02:03:24.902
Carl Ott: Ray - Airplane - the movie?

02:03:51.014,02:03:54.014
Ray: you got it!

02:04:59.010,02:05:02.010
Karim Virani: Looks like I picked the wrong week to quit smoking. ... i gotta bounce - dinner is ready

02:07:56.794,02:07:59.794
David: http://www.geology.smu.edu/~dpa-www/robo/firefight/firefight_05.mpg

02:08:16.702,02:08:19.702
David: lego bot doing firefighting at the old DPRG Garland headquarters

02:17:51.238,02:17:54.238
Ray: Got to call Sal..

02:19:39.665,02:19:42.665
Chris N: It's starting to get late on the east coast. Need to drop off unfortunately....

02:19:45.238,02:19:48.238
Murray Altheim: https://stackoverflow.com/questions/45462731/using-ffmpeg-to-change-framerate/45465730

02:20:17.054,02:20:20.054
Carl Ott: Chris sounds good - thanks for jumping in - feel free to swing by anytime !