DPRG July 2020 Monthly Meeting Chat Record

00:03:25.739,00:03:28.739
Harold Pulcher: You are good

00:04:02.707,00:04:05.707
Harold Pulcher: I can attest to that.....

00:09:29.353,00:09:32.353
Harold Pulcher: That is really cool. The hardware version of the L in
solid

00:12:44.608,00:12:47.608
Mary Mathias: So ROS basically makes it modular for swapping out one
robotic arm to another, right?

00:13:00.100,00:13:03.100
Pure Sol: ROS is open source right?

00:13:06.680,00:13:09.680
Ponder SomeMore: i got burned by rds

00:13:26.012,00:13:29.012
Ponder SomeMore: monitize

00:14:06.832,00:14:09.832
Harold Pulcher: Yep... check out ros.org

00:15:04.279,00:15:07.279
Mary Mathias: Do you think the Wowee robots work with ROS1?

00:15:20.747,00:15:23.747
Pure Sol: I am just bumped with a question, is it anything related to
what kids attend for robotics classes etc

00:16:15.860,00:16:18.860
Carl Ott: So it seems that ROS provides an excellent adaptation layer -
the ability to use 'de facto' standards based APIs for different
components to interact. Is that a fair statement?

00:16:40.385,00:16:43.385
Ponder SomeMore: ROS tends to be college level - learning curve is a bit
steep for younger students other than exceptional high schoolers

00:17:29.185,00:17:32.185
Ponder SomeMore: how soon to ROS 2?

00:18:25.061,00:18:28.061
Dave Ackley: How does ROS compare to MTTQ

00:20:41.650,00:20:44.650
Lou Amadio: https://aka.ms/ros

00:20:45.497,00:20:48.497

Lou Amadio: https://aka.ms/ros/docs

00:21:02.027,00:21:05.027
Ponder SomeMore: sorry, I meant how soon to feature parity ROS1 vs 2?

00:22:36.477,00:22:39.477
Carl Ott: can ROS1 modules be used /ported on ROS2?

00:23:24.560,00:23:27.560
Carl Ott: is ROS just a pub/sub system, or does it have things which make
it really well tailored to robots?

00:23:31.305,00:23:34.305
Ray: Is there a port to a rpi4 or is it under powered?

00:23:59.968,00:24:02.968
doug paradis: How difficult is it to move a node from ROS 1 to 2?

00:24:07.245,00:24:10.245
Harold Pulcher: I have ros2 core stuff on my rpi4 now

00:25:54.872,00:25:57.872
doug paradis: Harold, are you using linux or Win on your Rpi

00:26:44.068,00:26:47.068
Harold Pulcher: Linux... win 10 iit on a rpi4 aint really happening atm.

00:26:59.772,00:27:02.772
Harold Pulcher: Iot

00:27:34.262,00:27:37.262
Harold Pulcher: Yeah no bsp

00:27:52.571,00:27:55.571
Ponder SomeMore: is that the same reason Android Things isn't going
forward on pi4?

00:34:53.451,00:34:56.451
Ray: How much does it cost?

00:35:11.527,00:35:14.527
Carl Ott: https://techcrunch.com/2019/07/11/microsofts-399-azure-kinect-
ai-camera-is-now-shipping-in-the-u-s-and-
china/#:~:text=The%20%24399%20Azure%20Kinect%20DK,in%20a%20relatively%20s
mall%20package.

00:35:45.630,00:35:48.630
Molly X. GvH: Do you have a beta testing/working group for Azure Kinect
DK ROS?

00:37:14.942,00:37:17.942
Ponder SomeMore: we can't hear the dog

00:37:17.475,00:37:20.475

Carl Ott: does ONNX work with tinyML?

00:39:22.250,00:39:25.250
Mary Mathias: Cloud to ground, with all the layers, how fast is the
return of information? Is there a lag?

00:42:05.247,00:42:08.247
Dave Ackley: How does one get access to http://aka.ms? Request Id:
2a2598bd-e5c7-407f-af6c-79b9e1f22600
Correlation Id: 359b6112-5db7-4bd3-84c2-a7a369aac394
Timestamp: 2020-07-11T18:47:35Z
Message: AADSTS50020: User account 'dackley@verizon.net' from identity
provider 'live.com' does not exist in tenant 'Microsoft' and cannot
access the application '405e80fc-f8e6-40e6-b6b9-
e5bcc7e6813e'(RedirectionUxProd) in that tenant. The account needs to be
added as an external user in the tenant first. Sign out and sig

00:42:59.967,00:43:02.967
Harold Pulcher: That is a link shirtener

00:43:15.516,00:43:18.516
Harold Pulcher: Aka.ms/ros

00:46:17.199,00:46:20.199
Harold Pulcher: I hate typing on the phone...

00:51:36.330,00:51:39.330
Ron Dagdag: that's cool!

00:51:51.186,00:51:54.186
Harold Pulcher: So cool

00:51:56.919,00:51:59.919
Molly X. GvH: Very "Kick-Butt SHMEKIN!"

00:54:45.565,00:54:48.565
Ponder SomeMore: very nice!

00:54:55.418,00:54:58.418
Carl Ott: Fantastic Preso - thanks!

00:55:03.905,00:55:06.905
Ponder SomeMore: so your recommendation is if you are starting now, go
with ROS2?

00:55:06.563,00:55:09.563
Carl Ott: Could we talk about 'simple' ways to get started with ROS?

00:55:16.420,00:55:19.420
Molly X. GvH: Thank you Lou!!

00:57:46.867,00:57:49.867
Lou Amadio: http://www.robotis.us/turtlebot-3/

00:58:11.669,00:58:14.669
Ray: Don't we have a turtle bot 1??

00:58:16.396,00:58:19.396
Mary Mathias: How far is the Agricultural industry into ROS right now?

00:58:21.513,00:58:24.513
doug paradis: Is there a "A gentle introduction to ROS" type book for ROS 2?

00:58:33.799,00:58:36.799
Lou Amadio: https://ms-iot.github.io/ROSOnWindows/ros2/nav2.html

00:59:52.360,00:59:55.360
Marta Soncodi: Are there simulators that you can program in?

01:01:07.171,01:01:10.171
Ponder SomeMore: think of ROS as a way of composing lower level behaviors and sensing

01:03:19.042,01:03:22.042
Mary Mathias: I actually meant... is Microsoft working with the farming and cattle industry via Dynamics and ROS?

01:04:28.536,01:04:31.536
doug paradis: I think that many of us would like to have the robot self contained (using more advanced sensors (camera, lidar, etc...) running on either Rpi or Nvidia on board (putting up with os latency). Whenever you add wifi things get quirky (due to latency).

01:06:59.707,01:07:02.707
Mary Mathias: Oh, does Udemy perhaps have ROS courses?

01:07:58.725,01:08:01.725
Lou Amadio: https://www.youtube.com/channel/UCL7wy-iy_V76xxPnrIzGOZQ

01:11:12.556,01:11:15.556
Ron Dagdag: just want to share, it looks like a good course
https://www.robotigniteacademy.com/en/course/ros-in-5-days/details/

01:11:17.606,01:11:20.606
Lou Amadio: http://www.robotis.us/turtlebot-3/

01:14:09.088,01:14:12.088
Ray: What happened to the DPRG turtlebot? Can it be upgraded so someone can use it to explore ros if they wanted to?

01:14:39.230,01:14:42.230
doug paradis: I think it is in storage at DMS.

01:15:18.273,01:15:21.273
doug paradis: It is based on iCreate (roomba) based

01:20:08.849,01:20:11.849

david: Lou, great presentation, thank you. I noticed that the talk
didn't actually include any, ya know, robots. Can you show us a video of
a ROS robot doing something amazing so as to justify all the complexity?

01:20:19.467,01:20:22.467
Lou Amadio: https://maker.pro/arduino/tutorial/how-to-use-arduino-with-
robot-operating-system-ros

01:20:54.458,01:20:57.458
Lou Amadio: https://www.youtube.com/watch?v=dfWJvUtkJvQ&t=57s

01:21:13.942,01:21:16.942
Lou Amadio: https://www.youtube.com/watch?v=wPzMqAj9X0s&t=1s

01:21:25.013,01:21:28.013
Ponder SomeMore: how much time do you think it will it take you to write
the "HAL" for your HERO?

01:24:23.938,01:24:26.938
Mary Mathias: Your day job is way too much fun....

01:24:47.647,01:24:50.647
doug paradis: When do you think ROS 1 will be sunset

01:26:04.291,01:26:07.291
Mary Mathias: Thank you, Lou, such a great presentation! ... can you just
adopt us? :-)

01:26:04.633,01:26:07.633
david: you are double integrating the velocities from an IMU to get
odometry position?

01:26:52.355,01:26:55.355
david: fusing with what?

01:27:51.798,01:27:54.798
david: yes

01:30:10.469,01:30:13.469
Ponder SomeMore: what imu are you using?

01:30:24.970,01:30:27.970
Harold Pulcher: I have run... thanks again lou!!!!

01:31:01.183,01:31:04.183
Ponder SomeMore: is that the BNO055?

01:34:21.675,01:34:24.675
Marta Soncodi: Thank you, Lou. A great weekend, All!

01:34:28.030,01:34:31.030
Mary Mathias: Doesn't full navigation and bot identification of its
location all still all boil down to more sensors, more sensor information
integration, and pure processing power & speed?

01:36:33.047,01:36:36.047
doug paradis: I have to leave, Thank you Lou, a great presentation!

01:38:22.926,01:38:25.926
Ponder SomeMore: Lou, where are you based? Roughly. Don't need a GPS RTK
fix.

01:40:25.675,01:40:28.675
Molly X. GvH: Excellent Ron!! :)

01:42:12.827,01:42:15.827
david: simulations are doomed to succeed (R/ Brookes)

01:42:48.966,01:42:51.966
Ray: My wife would gladly give up the task of cleaning the cat's litter
box to a robot..

01:43:12.505,01:43:15.505
david: That's Rodnet Rookes

01:43:17.928,01:43:20.928
david: Brookes

01:43:23.423,01:43:26.423
david: Rodney

01:44:38.310,01:44:41.310
Mary Mathias: We just don't want to do housework and chores!! lol

01:48:55.104,01:48:58.104
Carl Ott: https://www.meetup.com/Hackster-DFW/events/271473567/

01:49:16.476,01:49:19.476
Carl Ott: https://www.meetup.com/Hackster-DFW/events/271781618/

01:52:49.916,01:52:52.916
Molly X. GvH: Thank you Carl! Thank you Ron!

01:54:58.731,01:55:01.731
david: carl, can you unmute 940 390 1950?

01:59:50.658,01:59:53.658
Clayton Timmons: David - Can you post a link to video?

02:00:17.467,02:00:20.467
Molly X. GvH: Yes Can you please post a link to the video. I have a hard
stop in 5 min

02:00:41.781,02:00:44.781
Molly X. GvH: TY David!

02:02:19.226,02:02:22.226
Carl Ott: Molly - You're quite welcome - feel free to join anytime!

02:02:20.308,02:02:23.308
Ponder SomeMore: different vlc window

02:02:35.996,02:02:38.996
Clayton Timmons: I wonder if everyone mutes their video feed if that
would help

02:02:45.692,02:02:48.692
Ponder SomeMore: you're presenting the old vlc window