## DPRG RBNV Chat Record - July 9, 2024

00:01:31.521,00:01:34.521 Pat Caron: Jon Mike W Ray 00:03:51.069,00:03:54.069 Pat Caron: Questions Tom 00:04:48.777,00:04:51.777 Carl Ott: ~7:43pm - Jon H shared an update wrt his balancing robot. Showed an 'ESP32 dongle' which allows him to easily send PID values for tuning real-time, by entering new PID values from a command line. Uses ESP-Now, with a little Python script from the desktop - to serial port ... etc... 00:08:58.950,00:09:01.950 Carl Ott: Then Jon came up with another board that has 3 dials - which allow him to make real time updates via knobs and push a button to send new values to the robot. 00:18:45.428,00:18:48.428 Carl Ott: ~7:57pm - showed his test rig to compare the time response of two different IMU. 00:21:23.391,00:21:26.391 Carl Ott: ~8:02pm - Mike W - update on his soccer ball concept (for a theater) and RoboColumbus. 00:39:24.442,00:39:27.442 Mike Williamson: https://github.com/mikew123/RoboColumbus2025 00:40:19.511,00:40:22.511 Carl Ott: ~8:20pm - Ray asked a 3D Printer question - looking for replacement parts - new nozzles for a little older unit 00:43:41.275,00:43:44.275 Carl Ott: ~8:24pm - Doug & John mentioned is a standard sized nozzle / maybe called a mark 3 / inexpensive & available on Amazon. 00:43:57.680,00:44:00.680 ed mart: https://www.microcenter.com/product/647069/leo-sales-ltd-04mmbrass-nozzle-25-pcs 00:51:34.646,00:51:37.646 ed mart: Reset bed leveling 00:53:45.034,00:53:48.034 Ted Meyers: microSwiss 00:59:46.876,00:59:49.876

Paul Bouchier: Ray described his beacon scheme for 6-can, where horizontal emitter beams are emitted by beacons and the receiver on the robot sits in the center of convergent fins so in theory the receiver will tell from which fin the beam came in from what the angle to the beacon is

01:01:27.642,01:01:30.642

Mike Williamson: I have a question about the human-pose ap for Oak-D Lite

01:02:00.414,01:02:03.414

Carl Ott:  $\sim 8:41 \text{pm}$  - Tom had a question - how to reproduce the equivalent of a data structure in C in a language like Python. Spends lots of time from many perspectives / trying to understand and optimize to a C-level within Python.

01:03:18.456,01:03:21.456

Carl Ott: ~8:43 - a byte a binary and a struct enter into a tuple...

01:05:46.479,01:05:49.479

Carl Ott:  $\sim 8:45 \, \text{pm}$  - Jon gave a Python explanation by way of a finite state machine example

01:14:21.245,01:14:24.245

Paul Bouchier: I have a video of taking a ride in a Waymo self-driving car today!

01:15:47.132,01:15:50.132

Carl Ott:  $\sim 8:56 \text{pm}$  - Tom described a PID library he's evaluating / Simple PID - based on Brett B's well-known library

01:17:37.401,01:17:40.401

Carl Ott:  $\sim 8.758 \, \mathrm{pm}$  - Mike W has a question / need help to get a Pose app to run on Oak-D Lite

01:18:07.284,01:18:10.284

Tom C - Hamilton, ON: Gotta go now, folks. Early start tomorrow, after a very early start today... Thanks for the input

01:19:32.279,01:19:35.279

Ponder SomeMore: i would like a napkin too

01:19:44.197,01:19:47.197

Carl Ott: need a numpy nampkin

01:19:52.584,01:19:55.584

Paul Bouchier: Sorry guys - didn't realize my mic was on

01:20:06.077,01:20:09.077

Carl Ott: all good- somehow it fit in

01:22:41.273,01:22:44.273

Paul Bouchier: <a href="https://youtu.be/sCpynPTzRj4">https://youtu.be/sCpynPTzRj4</a>

01:23:00.960,01:23:03.960

Carl Ott: ~9:02pm- Paul took a video after a fun day of trains, ships, boats and such in San Francisco. Also shared a video of a ride in Waymo

01:24:38.132,01:24:41.132

Carl Ott: jeez - pedestrians and traffic and bicyclists. whoa...

01:25:54.575,01:25:57.575

Carl Ott: this car needs an inflatable diver like the one Schwarzenegger movie...

01:38:05.309,01:38:08.309

Carl Ott: ~9:15pm - Harold gave an update on his NeoPixel based TV screen

01:54:42.361,01:54:45.361

Carl Ott: ~9:34pm - Pat gave an update on his 'big outdoor bot'. Got some parts in today, and started laying out parts into a nice plywood box

01:55:29.710,01:55:32.710

Harold Pulcher: https://youtu.be/NOzzW441ZMI

01:56:06.030,01:56:09.030

Carl Ott: Harold - thanks for the link to his inspiration

01:57:41.826,01:57:44.826 ed mart: Maple leaf special

01:59:19.305,01:59:22.305

Carl Ott:  $\sim 9:39 \, \text{pm}$  - Jon added an LED voltmeter to the rear of his rover - easy connection to the balance port on his rover battery