

DPRG RBNV Chat Record – January 10, 2023

Carl Ott

7:34 PM

as mentioned, - where to find the master list of DPRG Contest rules - these give great targets to aim for - a purpose for building and coding :-> <https://www.dprg.org/contest-rules/>

Doug Scott

7:34 PM

Is there a suggested design and/or BOM to help get a jump start on can-can soccer competition?

Carl Ott

7:35 PM

where to find notes and videos from past meetings <https://www.dprg.org/category/news/>

and here are the chat notes from 3 Jan

Carl Ott

7:42 PM

~7:41pm- Ray showed another ESP32 based board - which includes a display with capacitive touch

Carl Ott

7:44 PM

only cost around \$22 or \$23. Could spend less for lower resolution or resistive touch. Includes different widgets and dials/gauges...

As mentioned at the start - upcoming meetings

14 Jan 2023 – Iron Reign Progress Update & Practice Presentation <https://www.dprg.org/category/news/> and

<https://ironreignrobotics.org/>

21 Jan 2023 – SRS (Seattle Robotics Society) Finite State Machines- demystified for robotics Learn more at

<https://seattlerobotics.org/>

Carl Ott

7:58 PM

~7:57pm - Doug D - getting serious again by text to voice and voice to text - PicoVoice - believe is both directions - does wait word recognition, and voice command recognition...

Carl Ott

8:05 PM

~8:03pm - Michael shared feedback on a new motor driver board. Which - he will use as a portable test-bed, to carry with him, to work on code for his 6-can competition while he's out of town.

Chris N

8:06 PM

Standing by for your link, Ray...

Carl Ott

8:12 PM

~8:12pm - James showed progress on his Rubik's Cube solver

Ray Casler

8:13 PM

ESP32 board with Display: <https://www.aliexpress.us/item/3256804446638703.html?>

Carl Ott

8:17 PM

~ 8:17pm - Carl shared project on license plate detection <https://www.makeuseof.com/python-car-license-plates-detect-and-recognize/>

Carl Ott

8:20 PM

~8:20pm Ray - thanks for sharing the link on that ESP32 display and showing the "SDK" that let's you program by widgets...

Carl Ott

8:22 PM

ESP32 development board, standard 3.5-inch TFT screen and resistor TP, support one-key automatic download, provide LVGL demo and Arduino examples ESP3248S035 download link: <http://www.jczn1688.com/zlxz> Download password: jczn1688

Carl Ott

8:36 PM

~8:25pm - Doug P did an ad-hoc presentation run through DPRG contests commonly run in our spring competitions
Doug Scott

8:37 PM

I need to get going. Ill check out the recorded session for more contest details. Thank you.

Carl Ott

8:38 PM

Regarding the Challenge Level Line Following Contest - DPRG Champion Extraordinaire Ron Grant wrote an excellent simulation environment- we used this to virtually run the line following competition in the first year of COVID - it was blast - and the simulation is excellent & quite capable! <https://github.com/ron-grant/LFS>

Carl Ott

8:40 PM

You can find several excellent discussions and the competition at DPRG's YouTube channel - search for LFS <https://www.youtube.com/@DPRGclips/search?query=LFS>

Carl Ott

8:58 PM

For Donkey Car - You can Start Here: <https://www.donkeycar.com/> It's a pretty well-done open-source project that can help you learn to train and run a Tensor Flow based neural network. This neural net learns throttle and heading based on current image - then it uses that to drive itself around the course

Carl Ott

8:59 PM

several club members have built some variation of a Donkey Car - with many of us adapting the open-source Donkey Car software platform (typically built on an RC Car Chassis) - we've adapted the platform to our custom robot platforms...

Carl Ott

9:03 PM

~9:03pm - group discussion around competition options for Spring 2023

several interests in 6-can

Carl Ott

9:07 PM

Also some interest in Table Top

Carl Ott

9:11 PM

Also showed interest in Beginner & Advanced Line Follower, and also in Four Corners

Carl Ott

9:20 PM

~9:17pm - John K asked a sensor question - anybody with experience with this sensor? SEN0443 - an ICG-20660L / high-precision 6-axis IMU module with 3-axis accelerometer, 3-axis gyroscope and on-chip 16-bit ADCs

Carl Ott

9:21 PM

also showed a balancing robot platform by ebots tech

and a Polargraph Wall Draw Bot 2023

John Kuhlenschmidt

9:25 PM

<https://www.instructables.com/Polargraph-Wall-Draw-Bot-2023/>

<https://www.youtube.com/watch?v=gKx6vOmW4rE&t=318s>