DPRG RBNV Chat Record – Nov 2, 2021

Carl Ott
7:39 PM

~7:36 - Murray gave an update on a custom motor controller a small team is working on

Carl Ott
7:45 PM

~7:45 - Carl showed an elementary Sumo implementation / with Halloween style construction - on an mBot platform

Carl Ott
8:01 PM

~7:59 - Rud discussed b-trees - behavior trees (not to be confused with the data structure 'binary trees'). Per Wikipedia- https://en.wikipedia.org/wiki/Behavior_tree_(artificial_intelligence,_robotics_and_control)

Carl Ott
8:17 PM

here's another interesting looking write-ups https://towardsdatascience.com/designing-ai-agents-behaviors-with-behavior-trees-b28aa1c3cf8a

Carl Ott
8:28 PM

~8:25 - David A- question for the group - described professor of Kinesiology studying dance movement - trying to measure (or estimate?) the force on the floor e.g. for ballerinas... This professor would like a 10' x 10' floor that can measure dancers forces - whether ballerina on toes, or elbows or other parts of their bodies...

Carl Ott
8:31 PM

Rud - I've muted you since there seems to be some audio coupling on your machine - please unmute and jump in at any time...

Rud Merriam
8:31 PM

okay

Ponder SomeMore
8:33 PM

touchpads tend to be capacitive and not good for total load

Carl Ott
8:35 PM

presure sensing fabric - https://www.sparkfun.com/products/retired/14111

Carl Ott
8:36 PM

here's a paper on such a sensor https://www.mdpi.com/2076-3417/10/8/2877/pdf

Carl Ott
8:40 PM

~8:38 - Doug P showed an expansion board for a Raspberry Pi Pico - available from DFRobot https://www.dfrobot.com/product-2393.html

Carl Ott
8:43 PM

~8:42 - Ted asked a question about PID loops - Set Point - Current Value - Output. Question - what do you hook the output to?

Thalanayar Muthukumar
8:47 PM

Need to drop. Interesting discussions on behavior trees today. Thanks

Carl Ott
9:07 PM

Ted - consider this library and especially the introduction document:

// *** // Requires Arduino PID Library - Version 1.2.0 // by Brett Beauregard <br3ttb@gmail.com> brettbeauregard.com // For an ultra-detailed explanation of why the code is the way it is, please visit: // http://brettbeauregard.com/blog/2011/04/improving-the-beginners-pid-introduction/ // For function documentation see: http://playground.arduino.cc/Code/PIDLibrary // ***

Ray Casler
9:08 PM

Harold - are you driving to see the Rolling Stones?

Carl Ott
9:18 PM

~9:16 - Ray showed a new Wi terminal - with a display and lots of I/O...

https://www.seeedstudio.com/Wio-Terminal-p-4509.html?gclid=Cj0KCQjww4OMBhCUARIsAILndv637CvkBSNwPYNa2O4KegZHFkeR8ZLZlLtI9magVlRBisFvE8oGFYgaAqPKEALw_wcB

Wio Terminal: ATSAMD51 Core with Realtek RTL8720DN BLE 5.0 & Wi-Fi 2.4G/5G Dev Board with Free Course

Carl Ott
9:18 PM

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Wio Terminal: ATSAMD51 Core with Realtek RTL8720DN BLE 5.0 & Wi-Fi 2.4G/5G Dev Board with Free Course

Carl Ott
9:32 PM

~9:30 - Rud briefly showed a Sphero RVR https://sphero.com/products/rvr

Carl Ott
9:33 PM

Noted that it seems well suited to advanced high school if not early college...

Chris N
9:39 PM

gotta go......

Carl Ott
9:43 PM

comparison of Oak D and Oak D-Light https://discuss.luxonis.com/d/326-head-to-head-comparison-of-oak-d-and-oak-d-lite

Carl Ott
9:44 PM

~9:43 - Pat C - asking about pulling out pins from a JST connector...

Carl Ott
9:45 PM

group recommendation - can press hard enough using an exacto knife to unlock and pull out the pin / or jewelers screwdrivers / or pics...

Carl Ott
9:51 PM

~9:50 - Doug found a "military-grade" magnetometer compensation chip PNI RM3100...

https://www.amazon.com/High-Accuracy-Magnetometer-Geomagnetism-Military-Grade-High-Revolution/dp/B01N5QL0XC

Ray Casler
9:52 PM

It's under $40 ...

Robots New Zealand
9:53 PM

https://d-nb.info/1148110194/34

https://www.wit-motion.com/geomagnetic-sensor/witmotion-high-precision-rm3100-military.html