DPRG RBNV Chat Record – 10/11/2022

Carl Ott
7:47 PM
~7:41PM Michael gave an update his experiment with a cheap robot platform. Found a source for wheels with reasonable cost. Described the Arduino Timer/PWM collision problem. Also - GOLD STAR - showed - his robot running in a circle. Next step - will add a basic proportional controller.

Ponder SomeMore
7:49 PM
just paint the grass

Carl Ott
7:50 PM
~7:48pm - Ray gave an update - discussed results of an Adafruit color sensor (works well for orange cones in the summer, but not so good in the fall when grass and leaves turn brown). Hence - has moved to the OpenMV - using scissors to cut polarizing film...

Carl Ott
8:03 PM
~7:58pm - Doug showed progress on his robot. First - was working on noise / put capacitors on motors - feels like it helps. Second - bought stabilization bars - also talked through challenges and options to handle thick grass / suspension...

Doug Dodgen
8:03 PM
I'm going to bail early.

Ponder SomeMore
8:08 PM
lol
it is baaaadddd

Ponder SomeMore
8:14 PM
https://www.amazon.com/gp/product/B07DZWD4GT/ref=ppx_yo_dt_b_search_asin_title?ie=UTF8&th=1

Carl Ott
8:17 PM
Thanks Karim - Lots of options for robot sized inline Volt/Amp meters -
https://smile.amazon.com/s?k=DROK+0.28+Inches+DC+0-100V+10A+Digital+Voltmeter+Ammeter&i=industrial&crid=1MGVJJM5A223M&sprefix=drok+0.28+inches+dc+0-100v+10a+digital+voltmeter+ammeter%2Cindustrial%2C238&ref=nb_sb_noss

Carl Ott
8:25 PM
~8:25pm - a 6-can question - what sensors to read the walls?

Ponder SomeMore
8:26 PM
the walls are best ignored

Carl Ott
8:27 PM
But Karim - how many times have we seen a robot "Think outside of the box" and act immediately by "Drive outside of the box"?

Ponder SomeMore
8:28 PM
yes, boxes and walls are boring

Ponder SomeMore
8:36 PM
Harold's costume for RoboColumbus
https://cdn.shopify.com/s/files/1/2510/3662/products/STP7103ORANGE-01.jpg?v=1649305959

Doug P.
8:37 PM
Pololu distance sensor I like: https://www.pololu.com/product/4069

Carl Ott

8:39 PM
~8:36pm Harold - showed a quick robot platform put together from accumulated spare parts... .Programmed the robot from makecode.adafruit.com/#editor - a Google version of Scratch...
Uses a Cricket board. And Harold will enter it in the next outing of 4-square
Carl Ott
8:40 PM
GOLD STAR!
Carl Ott
8:43 PM
Harold earns Gold Star for robot moving under it's own power. Also described the various accessories included on the Crickit board... Here's info on the Crickit platform... https://www.adafruit.com/category/972
Carl Ott
8:49 PM
~8:48pm - John K showed various findings
"TrashRobotics" on YouTube
Carl Ott
8:51 PM
a link to TrashRobotics https://www.youtube.com/channel/UCHRTaqr8KSCfyo2_CLH-yfg
John Kuhlenschmidt
8:55 PM
https://www.thingiverse.com/thing:5533268
Pat Caron
8:56 PM
I have a follow up comment/question to Ray's presentation & an I2C follow up
Carl Ott
8:56 PM
TrashRobotics Videos
https://www.youtube.com/channel/UCHRTaqr8KSCfyo2_CLH-yfg/videos
TrashRobotics Self-Balancing Robot Video https://www.youtube.com/watch?v=ZRSPSNteWiU
John Kuhlenschmidt
8:57 PM
https://www.thingiverse.com/thing:5524375
Carl Ott
8:58 PM
~8:57pm - Pat - question about Ray's Adafruit Color Sensor - concern for whether the color sensor would trigger on fall foliage colors in Canada
Carl Ott
9:03 PM
~9:01pm - Pat mentioned links shared last week, related to i2C and Clock Stretching - specifically on BNO055...
Described the Software i2C library - easy to setup ./.. Also - an instructible giving detail:
Pat Caron
9:04 PM
https://www.mcgurrin.info/robots/723/ https://www.instructables.com/Raspberry-PI-Multiple-I2c-Devices/
Carl Ott
9:04 PM
Countermeasure Pants for 6-Can and RoboColumbus
https://cdn.shopify.com/s/files/1/2510/3662/products/STP7103ORANGE-01.jpg?v=1649305959 Hmm – a new DPRG award – the "Orange Star" ? (thanks Karim)
Accelerometer Alert https://www.bbc.com/news/technology-63157888 Rollercoaster rides trigger emergency calls from new iPhones
Carl Ott
9:06 PM
Bigger They Are, the Faster They Fail https://www.techspot.com/news/96254-first-exascale-supercomputer-has-hardware-failure-every-day.html The first extra scale supercomputer has a hardware failure every day
Chess Cheats "Run Amok" Getting to the Bottom of a Discrete Communication System…
https://arstechnica.com/gaming/2022/10/adafruits-cheekmate-gets-to-the-bottom-ahem-of-chess-cheating-controversy/ Adafruit's Cheekmate gets to the bottom (ahem) of chess cheating controversy

Carl Ott

9:08 PM
In Pennsylvania We Had Locks on the Rivers… https://flipboard.com/video/dw/5aa05f9c85 Germany completes new boat elevator
Call Of The Firewood – Let's Split Some Logs… https://interestingengineering.com/culture/physics-exploiting-axe-splits-wood-in-record-time Physics-exploiting axe splits wood in record time

Unknown
9:12 PM
Falkirk Wheel
https://www.youtube.com/watch?v=qHO9gARac-w
Carl Ott
9:13 PM
https://www.extremetech.com/extreme/334053-nasa-to-test-giant-centrifuge-for-space-launches
SpinLaunch - NASA to Test Giant Centrifuge for Space Launches
Unknown
9:14 PM
Yet another Falkirk Wheel video
https://www.youtube.com/watch?v=qXyfkaku-Jo
SpinLaunch doesn't have a timed door. it has a thin foil covering that the projectile just breaks. but the timing is very critical on the release latches
it's the elves, you know
Carl Ott
9:17 PM
elves and thin foil - the new smoke and mirrors...
Ponder SomeMore
9:18 PM
these counter measures can't hold a candle to orange bell bottoms
pretty much
sold