DPRG RBNV Chat Record – Dec 21, 2021

Carl Ott
7:41 PM
~7:40 - Pat- thanks and update on his Ardruino value issue... root cause - had accidently enabled a serial update routine which was updating the value unintentionally...
Carl Ott
7:43 PM
also - discussed odometry - fusing wheel encoders and a gyroscope-
Pat Caron
7:44 PM
Gyrodometry: A New Method for Combining Data from Gyros and Odometry in Mobile Robots (April, 1996) by J. Borenstein and L. Feng The University of Michigan http://www-personal.umich.edu/~johannb/Papers/paper63.pdf
Pat Caron
7:46 PM
The University of Michigan Where am I? Sensors and Methods for Mobile Robot Positioning by J. Borenstein , H. R. Everett , and L. Feng1 2 3 Contributing authors: S. W. Lee and R. H. Byrne http://www-personal.umich.edu/~johannb/Papers/pos96rep.pdf
Chris N
7:51 PM
David - sorry but I had to mute you. There was echo...
Ray
7:54 PM
shag- a-dellic carpet?
Carl Ott
7:55 PM
resend: The University of Michigan Where am I? Sensors and Methods for Mobile Robot Positioning by J. Borenstein , H. R. Everett , and L. Feng1 2 3 Contributing authors: S. W. Lee and R. H. Byrne http://www-personal.umich.edu/~johannb/Papers/pos96rep.pdf
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Paul Bouchier
7:57 PM
My quick & easy guide to calibrating using the Borenstien square: https://www.dprg.org/articles/2009-02a/
Carl Ott
8:04 PM
~8:03- Murray update - new parts in the mail including a SparkFun time of flight sensor
looking for a C or Python library to drive it
Carl Ott
8:05 PM
also - a SparkFun STM32 - looking for a way to flash / run MicroPython
Carl Ott

Chris N
8:15 PM
https://micropython.org/download/SPARKFUN_MICROMOD_STM32/
Pat Caron
8:16 PM
ST-Link V2
Ray
8:28 PM
light saber it is..
Carl Ott
8:29 PM
~8:28 - John G - talked about the motor driver board - challenges to assemble & solder ultra-fine-pitch parts to a circuit card
Carl Ott
8:35 PM
~8:31 - Scott - explaining 20% to 30% windowing rule of thumb for packages with large center pads underneath - how to make a stencil so that they sit flat when soldered...
~8:34 Scott- discussing ST Microprocessor toolset complication
Carl Ott
8:41 PM
Discussion continued on ST Micro having trade off - lots of power - but complex / steep learning curve before you can take advantage of it.
Carl Ott
8:43 PM
~8:42 - Scott gave an update for his BELCH robot. FT4232HD module - plug into USB and get 4 UARTs
Scott Gibson
8:47 PM
FT4232H Mini Module USB to 4port UART
"RPi HUB Module" USB hub with 2 UART ports
Carl Ott
8:48 PM
~8:48 Carl gave an update on duct tape and bailing wire robot, and raised questions about Linux/ Raspbian – how to attach to a processes console output – recommendations for process monitor & restart utilities
Murray Altheim
8:52 PM
https://github.com/ifurusato/ros/blob/master/cpu.service
Chris N
9:18 PM
carl - you have lost your focus!
Carl Ott
9:20 PM
~9:15 - Harold showed his lightsaber - from a recent Disneyland trip - very cool item
Carl Ott
9:26 PM
Built at "Savi's Workshop - Handbuilt Lightsabers"
https://disneyland.disney.go.com/shops/disneyland/savis-workshop-handbuilt-lightsabers/

Ray
9:29 PM
classic Disney joke - how are viagra and space mountain similar? A 30 minute wait for a two minute ride...
John Gauthier
9:32 PM
https://www.instructables.com/DIY-Life-Size-Phone-Controlled-BB8-Droid/
Carl Ott
9:47 PM
who's next?
Ponder SomeMore
9:47 PM
1 Harold = 5.56×10^-4 Hz
Carl Ott
9:49 PM
Ponder MoreMath...
Carl Ott
9:51 PM
~9:50 Doug D- showed Ruko C11 off-road RC truck platform - intending to use it as a next Robot base
Carl Ott
9:57 PM
~9:55 - Karim gave a brief update on the bulk robot purchase from the last week
7 photons
10:00 PM
I've got to go, have a good week :)
Pat Caron
10:01 PM
I'm going as well. Have a great holiday break & work on some robots!

Carl Ott
10:07 PM
~10:06 - Doug P showed a "teachable machine" service -
https://teachablemachine.withgoogle.com/
https://github.com/googlecreativelab/teachablemachine-community

Doug P.
10:17 PM
https://www.youtube.com/watch?v=NGQgRH2_kq8 -- good openCV tutorial YouTube channel