

DPRG RBNV Chat Record for 10/12/21

chat

Carl Ott
7:45 PM

~7:45 - Michael I showed progress with his claw machine...

Jim F - CalgaryAB
7:49 PM

Hello @Murray 

Carl Ott
7:52 PM

~7:52 - Doug P showed "Doug's Test Robot" doing obstacle avoidance...

Carl Ott
8:04 PM

~8:03 - Doug P showed next steps to improve obstacle avoidance...

Carl Ott
8:07 PM

~8:07- Doug P showed comparison - with and without obstacle avoidance

Carl Ott
8:10 PM

compared travel to a single target waypoint using obstacle avoidance along the way - versus travel to a target waypoint by way of multiple waypoints in lieu of obstacle avoidance

Carl Ott
8:19 PM

~8:19- Pat talking about rework on his "wooden monster" - using an STM32 as controller for motor driver. Asked himself "what if put FreeRTOS on it" to handle the 50 ms loop?

Pat Caron
8:21 PM

```
.pio/libdeps/bluepill_f103c8/STM32duino FreeRTOS/src/./portable/MemMang/heap_useNewlib.c:57:4:  
warning: #warning "This wrapper was verified for newlib version 2.5.0; please ensure newlib's external  
requirements for malloc-family are unchanged!" [-Wcpp]
```

Carl Ott
8:38 PM

~8:36- Chris - updates to his Romi platform - also revisiting ROS

Carl Ott
8:47 PM

talked about tradeoffs - and benefits of leveraging ROS for various sensors and purposes...

Carl Ott
9:02 PM

~8:58 - Chris showing a cool recording of data from robot driving around office and hallway - showing mapping localization estimate together with LiDAR data ...

Carl Ott
9:19 PM

~9:15 - Murray showed progress on his robot sensing obstacles or bumper events - scheduling some behavior into the message buss for the future ...

Ray Casler
9:32 PM

that wall will give away sooner or later...

Carl Ott

9:39 PM

~9:37 - Murray described a service to roll your own PCB - order offshore manufacture and even component assembly... <https://easyeda.com/>

Carl Ott

9:41 PM

~9:39 - David A showed a project he's working on for a friend - which uses a "Feather" data-logger and a BNO055...

team shared advice to check Adafruit for reference code to get started easily...

Carl Ott

9:44 PM

<https://www.adafruit.com/product/2796>

Adafruit Feather M0 Adalogger

Carl Ott

9:50 PM

~9:46- Harold- showed new Polymaker special 3D printing filament- a "polysmooth" PLA - very smooth - will dissolve & smooth with acetone... Will test & share results in the next week...

Carl Ott

9:59 PM

~9:57 Carl- shared an interesting link- 2 and 4 legged robots quickly teaching themselves to walk in a massively parallel virtual simulation environment, then demonstrating actual real-world functionality with physical robots in the real world... <https://arstechnica.com/gadgets/2021/10/these-virtual-obstacle-courses-help-real-robots-learn-to-walk/>