

Carl Ott  
7:37 PM

Round Table Update – Initial Order: Ray, Pat, Paul, Cooper, Chris, Karim

Carl Ott  
7:39 PM

Ray gave an update on his approach to build a CNC controller to breath new brains into an older large milling machine

Ponder SomeMore  
7:47 PM

Ray showing FluidNC

<https://www.youtube.com/watch?v=iwIS6Otwjgg>

Paul Bouchier  
8:01 PM

~ 8:00pm Pat gave update on MQTT vs rabbitMQ

Pat Caron  
8:02 PM

~ 8:00pm - Pat gave an update on rabbitMQ progress and unsuitability

Ray  
8:02 PM

so no rabbit hole then ...

Chris N  
8:05 PM

<https://zeromq.org/>

Ray  
8:09 PM

is there a ROS for dummy's book??

Chris N  
8:09 PM

yes

"Programming Robots with ROS"

Paul Bouchier  
8:10 PM

A Gentle Introduction to ROS

ROS by Example

Ponder SomeMore  
8:11 PM

The Pioneer 3 AT robots might have had a violent introduction to ROS

Doug P.  
8:15 PM

Paul recommends noetic version of ROS because it uses Python 3

Rud Merriam  
8:17 PM

"Practical Robotics in C++" by Lloyd Brombach

Ray  
8:22 PM

Doug P. - Do you have a good tutorial for connecting a SSD to a Raspi?

Harold Pulcher  
8:22 PM

the main site: <https://redis.com/>

Paul Bouchier

8:22 PM

8:30 Paul on SerialTransfer

[https://github.com/PaulBouchier/PiLinkTest/tree/master/lib/PiLink/examples/loopback\\_callbacks](https://github.com/PaulBouchier/PiLinkTest/tree/master/lib/PiLink/examples/loopback_callbacks)

Harold Pulcher

8:23 PM

talking about rpi specifically: <https://redis.io/topics/ARM>

how to install the open source version of redis: <https://redis.io/download>

Doug P.

8:27 PM

Not all SSD's can be used to boot Raspberry Pi without an SD card. Raspberry Pi computers require a boot drive cluster size of either 512 or 1024. A lot of the small cheap SSDs have a hardwired cluster size of 4096. You can't boot a Raspberry Pi from these drives. They can be used for storage or to boot with the use of a SD card. A Rpi will not boot the Rpi by itself without an SD card. I recommend using drives that have cluster sizes of 512, so that you boot from the SSD.

Ray

8:31 PM

So did you find an SSD with the right cluster size?

Ray

8:37 PM

Does anybody know what happened to the robot arm at the maker space? Could Clem use it?

Pat Caron

8:46 PM

Doug, I am successfully booting the PI 4 from a SSD using Raspberry Pi OS. Using the same drive, I have much trouble getting Ubuntu Mate 20.04 to boot

Doug P.

8:54 PM

I have 2 SSDs that work. I believe any of the name brands (like Samsung) will work, but they are usually overkill in terms of capacity, power required, and cost. I was looking for a solution in the small 128GB from China that cost about \$30. I found one that worked like a champ, and about 3-4 that didn't (cluster size hard wired to 4096). My best advice is to read any answers / reviews on the SSD that you are considering. If no info is available, ask about the cluster size. I just noticed that a lot of cheap 128GB drives are now available from companies like Kingston (\$20). However, to use these you need a USB3 to SATA adapter which raises the cost to about \$30. These should work.

Doug P.

9:12 PM

Chris recommends VMware over VirtualBox for creating Linux virtual machine on Windows box.

He also recommends using Terminator to see the output of your multiple terminals.

Doug P.

9:23 PM

Chris showed way to have python script restart itself by monitoring the last time that the file was saved.

Doug P.

9:29 PM

Chris showed obstacle avoidance demo video of his robot.

Ponder SomeMore

10:01 PM

I think Chris was showing a live camera view of the robot, not a recorded video

ed mart

10:01 PM

Thanks Chris

Chris N

10:02 PM

Actually it was recorded, but I used OBS to make the video come through as if it was via camera

Paul Bouchier

10:05 PM

~10:00 Karim gave update on the recently arrived ATX? robots

Paul Bouchier

10:06 PM

Time unknown: Chris showed his robot running around in a loop doing obstacle avoidance. Subsequent discussion on tools and workflows

Carl Ott

10:13 PM

~10:13 John K showed a balancing robot with no microcontroller...

<https://www.instructables.com/Balancing-Robot-With-No-Microcontroller/>

Carl Ott

10:16 PM

also showed a robot arm clock... picks up and moves the digits to tell the time...

<https://www.instructables.com/RoboClock/>

Pat Caron

10:21 PM

Another great night guys! See you next week