## DPRG RBNV Chat Record - 4/20/2021

Carl Ott

7:53 PM

**Upcoming Events** 

21 April

- Hackster Meetup "BlindVia" PCB guy About Designing Circuit Cards Learn about basics of PWB design, assembly, and 3d printing prototyping. General education of the manufacturing process will be used to demonstrate things to consider, and how decisions can be made during design that make it easier to build. <a href="https://www.meetup.com/Hackster-DFW/events/277642043/">https://www.meetup.com/Hackster-DFW/events/277642043/</a>
- ExoMy Mars Rover Model Special Guest Presenters from Germany & Switzerland Miro & Max <a href="https://www.meetup.com/Build-More-Robots-with-DPRG/events/277646600/">https://www.meetup.com/Build-More-Robots-with-DPRG/events/277646600/</a> Learn about their ExoMy project <a href="https://esa-prl.github.io/ExoMy/">https://esa-prl.github.io/ExoMy/</a> The ExoMy is a programmable \$600 Mars rover you can build yourself | Engadget (<a href="https://www.engadget.com/esa-exomy-rover-221008299.html">https://www.engadget.com/esa-exomy-rover-221008299.html</a>) 12 June
- How to do navigation w/o making a map David Anderson Updated from compiled & published in the Seattle Robotics Society some years ago

10 July

Seattle Robotics Society - Robothon https://robothon.org/

21 August

Outdoor Rover Competition Baseline "RoboColumbus-Plus" See <a href="https://www.dprg.org/contest-rules/">https://www.dprg.org/contest-rules/</a> <a href="https://www.dprg.org/wp-content/uploads/2018/09/robocolumbusplus-20150726.pdf">https://www.dprg.org/wp-content/uploads/2018/09/robocolumbusplus-20150726.pdf</a>

Carl Ott

8:05 PM

Murray - looking into publishing own libraries on <a href="https://pypi.org/">https://pypi.org/</a> - very cool!

doug paradis

8:12 PM

https://www.vexrobotics.com/motors.html

2-wire 393 motor

Harold Pulcher

8:24 PM

https://www.adafruit.com/product/2717

Kevin Shin

8:50 PM

Thank for the great discussion! See u next week!

Carl Ott

8:51 PM

ESP32-Cam -> looks pretty interesting \$ 10 per might be a useful part for telepresence or robots with multiple cameras examples of running a subset of OpenCV on it, and even using it as a webserver <a href="https://www.amazon.com/ESP32-CAM-Bluetooth-Camera-Module-">https://www.amazon.com/ESP32-CAM-Bluetooth-Camera-Module-</a>
Development/dp/B07S5PVZKV/ref=sr 1 4?dchild=1&keywords=ESP32-

<u>CAM&qid=1618958966&s=electronics&sr=1-4</u> <u>https://randomnerdtutorials.com/projects-esp32-cam/</u> <u>https://randomnerdtutorials.com/esp32-cam-opency-js-color-detection-tracki</u>

Carl Ott 8:53 PM

HoverSim <a href="https://youtu.be/tN\_-D6gYl6Q">https://youtu.be/tN\_-D6gYl6Q</a>

Asteroids mode Harold Pulcher 8:54 PM

Doug Dodgen, this guys uses belts on allI his motors: <a href="https://www.youtube.com/watch?v=q1u\_cC-5Sac">https://www.youtube.com/watch?v=q1u\_cC-5Sac</a>

Carl Ott

9:03 PM

as noted tonight - from David's post to d-list Interesting

approach: <a href="https://spectrum.ieee.org/automaton/robotics/industrial-robots/no-human-can-match-this-highspeed-boxunloading-robot-named-after-a-pickle">https://spectrum.ieee.org/automaton/robotics/industrial-robots/no-human-can-match-this-highspeed-boxunloading-robot-named-after-a-pickle</a> Not going for full autonomy, assumes some human intervention to handle edge cases.

Carl Ott

9:15 PM

here's an article with the molten mess that was once a Tesla model

S https://www.autoblog.com/2021/04/20/tesla-crash-victims/

and another https://abc13.com/investigators-to-question-tesla-after-crash-that-killed-2/10528089/

Carl Ott

10:06 PM

https://www.adafruit.com/product/400

Breakaway header is like the duct tape of electronics, and this header is one better with extra long pins on both sides. This makes it great for connecting things together that have two sockets - especially solderless breadboards. We also use these with our female-female socket jumpers to create female-male and male-male jumpers!

Carl Ott 10:08 PM

you can find them in bulk on Amazon <a href="https://www.amazon.com/DIKAVS-Break-Headers-Headers-Headers-Lonnector/dp/B076F64ZCJ/ref=sr\_1\_5?dchild=1&keywords=breakaway+headers&qid=1618974481&sr=8-5">https://www.amazon.com/DIKAVS-Break-Headers-Headers-Lonnector/dp/B076F64ZCJ/ref=sr\_1\_5?dchild=1&keywords=breakaway+headers&qid=1618974481&sr=8-5</a>

Attachments area

Preview YouTube video HoverSim Asteroids Mode 1st Runs



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Preview YouTube video Building a ROS Robot for Mapping and Navigation #1



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