## DPRG RBNV Chat Record - 11/1/2022

Carl Ott

7:41 PM

12 Nov 2022 - DPRG RoboColumbus <a href="https://www.dprg.org/robocolumbus-2022/">https://www.dprg.org/robocolumbus-2022/</a>

Carl Ott

7:43 PM

~7:42pm - Ray showed a video demonstrating an 8 element distance sensor from Sparkfun

Carl Ott

7:46 PM

it's actually an 8x8 sensor array. Sparkfun VL53L5CX - a time of flight sensor SEN-18642 learn more here <a href="https://www.sparkfun.com/products/18642">https://www.sparkfun.com/products/18642</a>

Carl Ott

7:49 PM

Check out the SparkFun product page - which shows a GIF illustrating a 3D distance image...

Carl Ott

7:56 PM

Here's a link to the ST Micro vendor data sheet - <a href="https://www.st.com/en/imaging-and-photonics-solutions/vl53l5cx.html">https://www.st.com/en/imaging-and-photonics-solutions/vl53l5cx.html</a>

Carl Ott

7:57 PM

and the actual vI53I5cx data sheet- https://www.st.com/resource/en/datasheet/vI53I5cx.pdf

Carl Ott

8:11 PM

~8:!0pm - John G - showed a video of his face tracking skull face for Halloween - 2 of them actually - used for trick-or-treat last night...

GOLD STAR for John G!

John Gauthier

8:19 PM

https://www.thingiverse.com/thing:4830026

Carl Ott

8:20 PM

~8:15pm - started a discussion on 3D printers

Ray Casler

8:20 PM

https://www.microcenter.com/product/623606/creality-ender-3-v2-3d-printer

This one is \$200

John Gauthier

8:21 PM

http://www.nilheim.co.uk/latest-projects-and-blog/simplified-3d-printed-animatronic-dual-eye-mechanism

Carl Ott

8:22 PM

John - thanks for sharing links to skull and eye...

Carl Ott

8:24 PM

CAD / Modelling recommendations?

Group answer - depends on learning curve

John Gauthier

8:24 PM

Fusion 360, free hobbyist version

Carl Ott

8:24 PM

Tinker CAD, Design Spark Mechanical

**Ted Meyers** 

8:24 PM

onshape.com

Carl Ott

8:25 PM

lots of votes for Design Spark Mechanical - is well suited to make simple hobby robot parts

**Ted Meyers** 

8:25 PM

onshape is free (with limitations) and fairly simple

**Ted Meyers** 

8:28 PM

Highly recommend Prusa Slicer (works on lots of printers, not just Prusas)

Carl Ott

8:28 PM

Filament - PLA easy to work with but will melt in your car in the summer. Most of club uses ABS filament

Ted Meyers

8:28 PM

PETG is also fairly easy to print

TPU can be done, just go slow

**Ted Meyers** 

8:30 PM

PETG is able to handle higher temps than PLA. TPU is flexible

Carl Ott

8:37 PM

~8:35pm - showed an example with PrusaSlicer - using PrusaSlicer to merge different models together, and create exclusion zones to print only part of the entire model... Several other slicers listed in the discussion...

Carl Ott

8:46 PM

~8:45pm - Michael showed pictures from his claw machine - for the Halloween Carnival - dispensing candy

Carl Ott

8:50 PM

~8:48pm- Karim showed the current YouTube for Mechavator...

ed mart

8:54 PM

Ed in Connecticut

Carl Ott

8:55 PM

~8:54pm - Doug P showed progress on his outdoor rover

Carl Ott

9:07 PM

~9:06pm - David A showed a video with jBot ping ponging between two cones

Carl Ott

9:20 PM

GOLD STAR for Doug-Nice Progress Video

Carl Ott

9:22 PM

~9:21pm Michael showed a prototype of his claw hand...

showed a cool technique to use a soldering iron to install brass screw inserts into his 3d piece

Carl Ott

9:31 PM

~9:30pm - Ray showed a small milling machine he made earlier this year

Ponder SomeMore

9:32 PM

thanks guys, i gotta bolt

John Gauthier

9:41 PM

https://smile.amazon.com/HiLetgo%C2%AE-NRF24L01-Wireless-Transceiver-

Compatible/dp/B00WG9HO6Q/ref=sr\_1\_2\_sspa?crid=24ZN5ZTKD04MG&keywords=nrf24l01&qid=1667356857&qu=eyJxc2MiOiI0Ljl1liwicXNhljoiMy45NSIsInFzcCl6ljMuODQifQ%3D%3D&sprefix=nrf24l01%2Caps%2C84&sr=8-2-spons&psc=1

Carl Ott

9:42 PM

~9:40PM- John asked if any experience on a long range wireless transceiver (NRF24L01). Crowd had lots of wireless radio experience but nobody with experience on that specific radio...

John Gauthier

9:42 PM

https://smile.amazon.com/MakerFocus-NRF24L01-Wireless-Transceiver-

Regulator/dp/B08LSPZHT8/ref=sr\_1\_4?crid=18ZGRXWBQ0VEJ&keywords=nrf24l01&qid=1667356922&qu=eyJxc2 MiOil0Ljl1liwicXNhljoiMy45NSIsInFzcCl6ljMuODQifQ%3D%3D&sprefix=%2Caps%2C83&sr=8-4

Carl Ott

9:45 PM

2.4 GHz, 1100 meters of range plus - in a certain mode- one master can broadcast to 6 receivers..