

DPRG RBNV Chat Record – November 5, 2024

00:05:45.879,00:05:48.879

Pat Caron: Scott - video on his robot running in his backyard. He is refining his object detection for obstacles in his path. He has trained his blob detection on several different lighting scenarios.

GOLD STAR!

00:06:57.081,00:07:00.081

Blue Steel: Scott, is it the TFmini Plus?

00:10:19.178,00:10:22.178

ed mart: Did you super glue tires to rims ?

00:11:56.507,00:11:59.507

Blue Steel: https://www.robotshop.com/products/benewake-tfmini-plus-micro-lidar-module-uart-i2c-12-m?gad_source=1&gclid=Cj0KCQiAoa5BhCNARIsADVLzZfJw0zOIF_AaX1fv5iPPoUh9PbcFTS_AfZg2dOca9O_KV6zDS9-MrkaAIT6EALw_wcB

00:23:07.282,00:23:10.282

Pat Caron: Scott gave an overview of his sensors and MPU communications system

00:33:33.861,00:33:36.861

Pat Caron: Ray - Working on his 2wd platform. When going downhill it tends to tilt and trigger the bumper. He had wheel slipping problems and caster problems as well. He is working on his Gobuilda 4wd platform using GT2 belts. He had a problem with the setscrew loosening and interfering with his belt drive. He re-did the bumper, so it trips on either side or in the middle. He uses the bumper for obstacle detection and cone detection. He uses his display interface to see how his robot is performing.

00:55:22.282,00:55:25.282

Jim F - CalgaryAB: Hello @Gary T from (JimFyyc)

00:55:59.141,00:56:02.141

Gary T: Who is this? What kind of last name if Fyyc, how do you even pronounce that? Lol

00:56:18.687,00:56:21.687

Gary T: How is it going?

00:56:31.898,00:56:34.898

Gary T: I have looked at ordering some gear motors for some robot things.

00:56:56.969,00:56:59.969

Gary T: I am also looking at putting together a Lego-scale train for the maker space.

01:05:27.273,01:05:30.273

Pat Caron: Tom - Reported on his sensors. He has VL53 TOF, ultrasonic and a Sharp sensor mounted on a servo. He is using an exponential filter on two of his sensors. He is testing using a small cone (about 12"). He showed how his data works with a test setup in his basement data was collected and displayed on a spreadsheet. He showed us his efforts to smooth out his speed feedback using a magnetic sensor on one wheel of his 4-wheel robot.

01:05:30.437,01:05:33.437

Pat Caron: He ended up using a moving average filter for his PID speed regulation. He showed some graphs with some speed curves with setpoint and output and integration. He

is suffering with an underpowered chassis. He will try to move everything to a more powerful chassis.

01:12:50.162,01:12:53.162

Pat Caron: Pat - Scrambling to update his communication backbone. He was using a Mosquito Broker, but the message lag became too long. He is working on a new Redis Server communication backbone that is much faster and more flexible.