

## DPRG RBNV Chat Record – January 16, 2024

Brad Garton

7:32 PM

Need to turn on sound one sec.

Carl Ott

7:38 PM

Starting Queue

Doug D Mike W Carl O Paul – Roborama/ Spring Contest discussion Ray Open Mic

~7:37pm - Doug D - GOLD STAR - showed RoboDog working once again!

Carl Ott

7:40 PM

~7:39pm - Mike W - added automation to last week's demo - his indoor platform running autonomous - did a 4 square waypoint routine...

GOLD STAR for Mike W!

Carl Ott

7:44 PM

Paul B gave an ad-hoc description of ROS Transforms... then by 7:43pm - Mike showed a ROS .rviz2 screen

Carl Ott

7:46 PM

7:46 PM - Carl shared a discussion with ChatGPT / using C++ Helper plugin and GPT4 - Purpose- compare and contrast Behavior Tree and Subsumption Architectures, with Arduino Robot style pseudocode examples. - I first asked for an example Behavior Tree code Framework for a Robot. - ChatGPT provided one in C++, then in Arduino friendly pseudo-code

- Then I asked it to refactor the framework into a Subsumption Architecture style - Then we went back and forth comparing the framework styles - Finally, I asked for code skeletons for a robot with specific sensors, a "health check & safe mode", obstacle avoidance and also waypoint navigation. - <https://chat.openai.com/share/994e01a0-b757-4a33-b92c-12d145dde8ac>

Carl Ott

8:02 PM

~8:00pm - Brendon described a ChatGPT extension for Chrome - basically pay per token to work directly in Google Docs and Google Sheet

GPT for Sheets and Docs

=> [https://workspace.google.com/marketplace/app/gpt\\_for\\_sheets\\_and\\_docs/677318054654](https://workspace.google.com/marketplace/app/gpt_for_sheets_and_docs/677318054654)

Brad Garton

8:07 PM

Here is one of the chief architects of ChatGPT build a toy one from

scratch: <https://www.youtube.com/watch?v=kCc8FmEb1nY&t=22s>

<https://www.youtube.com/watch?v=kCc8FmEb1nY&t=22s>

Brad Garton

8:10 PM

Andrej Karpathy

Carl Ott

8:15 PM

Next in queue Paul – Roborama/ Spring Contest discussion Ray Open Mic

Carl Ott

8:16 PM

~8:15pm - Paul B - explained that he'd take the lead to organize Spring RoboRama - DPRG's annual indoor contest.

Carl Ott

8:17 PM

DPRG's master rules set.

<https://www.dprg.org/contest-rules/>

Carl Ott

8:20 PM

Based on tonight - sounds like we're interested in the following contests

Quick Trip Four Corners Five-Spot Six Can

Carl Ott

8:32 PM

Tentatively targeting Early May - exact date TBD... With a practice session one or two weeks before hand

Ponder SomeMore

8:44 PM

we'd likely want to participate in Roborama in May.

Carl Ott

8:46 PM

Karim - that's excellent news. FWIW - my wife's 7th grade cousin and his 8th grade FIRST partner might be interested.

They'll be done competing soon but want to keep going - so I intend to push them to DPRG RoboRama as a target for them to get odometry working...

Ponder SomeMore

8:52 PM

approaching minimum viable population

They're gaming.

Carl Ott

8:59 PM

Brendon - about the line following - here's a link to the simulator Ron Grant built. We (DPRG) used it for a virtual competition. But it's also an excellent platform to explore different sensor and architectural choices... Check it out

- <https://github.com/ron-grant/LFS>

Carl Ott

9:04 PM

~9:03pm - Discussed DPRG D-List issues.

Brendon Holt

9:08 PM

<https://www.dprg.org/joining-dprg/>

Carl Ott

9:09 PM

Brendon - more about the Line Follower Simulator - Virtual Competition from Dec 2020 Several people ran robots against the DPRG Challenge Line Following

course <https://www.youtube.com/watch?v=Kx65MMQbYN0&t=3784s> some background presentations & discussions leading up to the Dec 2020

competition <https://www.youtube.com/@DPRGclips/search?query=line%20follower%20sim>

Carl Ott

9:13 PM

~9:13pm - Paul gave an update on the ROS 2 workshop he's planning.

Paul Bouchier

9:13 PM

<https://sites.google.com/site/paulbouchier/home/ros2-in-docker-workshops>

Carl Ott

9:20 PM

~9:18pm - GOLD STAR! Ray gave a demo of his 6-can robot - VERY QUICKLY chasing after cans, scooping them up and delivering them to the goal... (pay no attention to the goal post doing its best to confuse his robot)

Carl Ott

9:28 PM

~9:27pm - Ray explained changes he made to improve his robot / both consistency and speed. BEWARE SCOTT G...

Carl Ott

9:46 PM

~9:44pm - Tom C- raised a question & sparked discussion about serial port setup for the ROS workshop Paul is preparing...

Carl Ott

9:50 PM

~9:48pm - Tom also showed progress with claws he built / thanks Doug P...

Carl Ott

9:54 PM

~9:53pm - Paul B showed a TurtleBot simulator - for use with his scripted robot driver.

TurtleBot simulator - for use with his scripted robot driver.