DPRG RBNV Chat Record – May 23, 2023

Carl Ott 8:04 PM ~8:02pm - Brady - update on a 'robot camp' he's running with some teenage relatives... shared some experiences and thinking for next steps Pat Caron 8:05 PM Carl, can you add me to the queue? I have a question about the line following contest course. Carl Ott 8:06 PM Pat - you bet - here's the queue in work: Brady Arun Doug P Pat Carl Ott 8:13 PM ~8:11pm - Arun joined as first timer - working on drones, discussed like a CX10 (motor to motor is about 5" diagonal" - hopes to work on making a swarm, which would require indoor positioning... Opened a nice discussion on how to approach the problem... Carl Ott 8:14 PM https://www.amazon.com/Cheerson-CX-10-Mini-Quadcopter-Drone/dp/B00KXZC762 Carl Ott 8:21 PM If anybody comes across options for indoor positioning systems - Please speak up & share your findings ed mart 8:22 PM Interesting robot on govdeals moron powerboat. Carl Ott 8:22 PM ~8:21pm - Doug P shared his findings with ChatGPT - after being inspired by discussion in the last couple weeks. Doug decided to ask the question of whether he could program a robot using ChatGPT... Carl Ott 8:26 PM Doug explained the conversation back and forth with ChatGPT to generate and refine potentially viable source code... Carl Ott 8:29 PM Harold do you want to comment on Doug's chat presentation? Carl Ott 8:31 PM ~8:31pm - Doug showed the results of trying to execute the code on a physical device... Carl Ott 8:32 PM And the results were- made non-blocking program to read an HC-04 Ultrasonic Sensor... Carl Ott 8:33 PM Arun - what are the odds you could ask ChatGPT to brainstorm options to provide indoor positioning to manage a swarm of hand-sized drones? Carl Ott 8:35 PM ~8:34pm - Doug showed how he continued to refine the prompts to ask even more from ChatGPT... Ponder SomeMore 8:37 PM Brady, Doug mentioned something I shared 2 weeks back. It was specifically about whether GPT is something FTC teams need to look into. So you might want to check out that session too. The actual articles are here: https://ironreignrobotics.org/coachcorner/chatGPTforRobots/ https://ironreignrobotics.org/coachcorner/chatGPT4forRobots/ Carl Ott

8:42 PM ~8:41pm Hence - Doug found 2 pieces of code generated by ChatGPT - would be an issue if you didn't understand code. But if you knew what to look for, you can actually produce useful results... Carl Ott 8:47 PM ~8:46pm - Doug went there. He invoked not only ChatGPT - but also our friend PID loops to the discussion... Carl Ott 8:50 PM ~8:47pm thru 8:50pm - discussion started around observations, that if you miss errors early on in a chat, and continue a conversation a long time, those early errors tend to grow over time. Karim observed that GhatGPT4 is better than 3.5 in this regard - but still something to manage... Carl Ott 8:51 PM Discussed a value of- close to a human of being able to work through problem solving interactively - helping the human more quickly develop good outcomes. Carl Ott 9:08 PM How to get started? Visit https://chat.openai.com/ and create an openAI login if you don't already have one.. That same login may also give you access to Dall-E2 Ponder SomeMore 9:09 PM https://www.zdnet.com/article/how-to-use-chatgpt/ Carl Ott 9:11 PM Karim mentioned this plugin which can export your ChatGPT conversations in a sharable way https://chrome.google.com/webstore/detail/sharegpt-share-your-chatg/daiacboceoaocpibfodelibdfacokfib "ShareGPT" Carl Ott 9:16 PM ~9:14pm - Brady mentioned some decent looking Udemy courses on how to learn about and get started with ChatGPT Rav Casler 9:19 PM I'd like to ask it - what is meaning of life, the universe and everything and see how long it takes to return - 42 Ponder SomeMore 9:20 PM right away Carl Ott 9:20 PM Ray - see this chat at 9:08pm - just go ask it... Carl Ott 9:21 PM ~9:21pm - Pat asking about course printing for some of the contests... Carl Ott 9:24 PM Check out this repo for SVG source of various DPRG line following courses, as well as some test courses. https://github.com/dprg/Contests/tree/master/Line%20Following From the repo README: The source svg files to generate courses for each level of DPRG line following competition is located in the directory named for the competition level. Also included in these directories are png files of past versions of the course. These png images are suitable for submission to https://stickersbanners.com/ without modification to generate copies of courses. Carl Ott 9:27 PM The repo also includes smaller test course layouts for each level https://github.com/dprg/Contests/tree/master/Line%20Following/Test%20Courses Carl Ott 9:32 PM Here's a link to Carl's version of LFS - the Line Follower Simulation environment written by Ron Grant and used in

Here's a link to Carl's version of LFS - the Line Follower Simulation environment written by Ron Grant and DPRG's firs https://github.com/cottjr/LineFollowerSimLib

DPRG's first virtual robot competition Carl Ott 9:35 PM ~7:34pm - Jack showed progress - adding tail fins to his one robot. And also making progress on his automated drink making robot. Carl Ott 9:43 PM BLACK STAR for Jack - Significant progress and a running robot to show ... Carl Ott 9:46 PM @pat - here's background on the LFS - Line Follower SIM that traces back to a DPRG status update presentation on LFS - as well as a link to Ron's original source: https://www.dprg.org/lfs-simulator-update-and-installation-dprgvirtual-monthly-meeting-nov-14th-2020/ and https://github.com/ron-grant/LFS Ponder SomeMore 9:59 PM have a good nite folks Ray Casler 9:59 PM https://wiki.sipeed.com/hardware/en/maixsense/maixsense-a010/maixsense-a010.html Carl Ott 10:00 PM ~10:00pm - Doug D showed a little progress on his steampunk robot... Ray Casler 10:01 PM https://www.seeedstudio.com/Sipeed-MaixSense-A010-p-5562.html lists the price. Pat Caron 10:03 PM Thanks Ray 7 photons 10:09 PM I'm going to go now, see you all next time.