DPRG RBNV Chat Record – Aug 28, 2021

Carl Ott 7:39 PM Hackathon!!! 1-3 Oct 2021 https://hackdfw.com/ Robots New Zealand 7:42 PM Personal Robotics on Discord https://discord.gg/F4U9Z9Sg <aged link- need to ask for a new one> **Paul Bouchier** 7:43 PM Rocos is the NZ robot comms company we worked with Carl Ott 7:45 PM ~7:43pm David Anderson- reviewing results of PID response analysis gave last week- showing whether "overshoot" was result of PID loop underdamping or inertia feeding back into the current loop Rav Casler 7:58 PM Dave did you tune to be critical damped? Carl Ott 8:00 PM ~ 7:58pm - discussion continued with a simple approach to tune a PD controller Ray Casler 8:02 PM a tiny dancer, a dancer for money ... Ray Casler 8:07 PM The method I use is very complex.. I push the auto tune button the roboclaw gui... Carl Ott 8:07 PM @Ray - hahahahaha Carl Ott 8:09 PM ~8:09pm - David Ackley showed his Chassis Dynomometer - for adding a load for tuning for PID tuning Carl Ott 8:18 PM ~8:18pm - Murray - discussion on the Personal Robotics Discord - about having Murray work on a custom motor controller board... Carl Ott 8:21 PM motivations - lower cost- embedded PID loop in MicroPython - with an I2C interface plus - leverage collaborative effort to get something aligned with personal targets Carl Ott 8:23 PM ~8:22pm - Murray showing progress towards his Mars Rover - showed a 4 wheel platform... Carl Ott 8:25 PM

~8:23pm Murray showed progress towards custom Python OS- servo vs. ballistic behaviors. Has added a scheduling macro e.g. list of events or Python lambdas... Ray Casler 8:28 PM So it is not hat day in New Zealand? Ponder SomeMore 8:29 PM These have exploded recently https://www.amazon.com/s?k=gimbal+stabilizer+for+smartphone&crid=2G2E5LLSRS5Q4&sprefix=gimb al%2Caps%2C196&ref=nb_sb_ss_ts-doa-p_4_6 Carl Ott 8:32 PM ~ 8:30 - Carl showed demo of 3 axis stabilized phone tripod.. https://www.snoppa.com/index.html Thalanayar Muthukumar 8:33 PM https://www.amazon.com/DJI-CP-TL-00000026-02-Tello-EDU/dp/B07TZG2NNT/ref=sr_1_3?dchild=1&keywords=dii+tello&gid=1632879187&sr=8-3 129\$ with gesture recognition Ponder SomeMore 8:35 PM we're talking we can hear and see you Carl Ott 8:38 PM ~8:36pm- Harold and Kumar discussed ExoMy lessons learned - setting up the project using a Docker container... Carl Ott 8:41 PM ~8:41pm- Harold showed side project for person at work- a Smash Button to use as an OBS controller (ie. for video streaming) Carl Ott 8:52 PM ~8:48pm- Chris talked about code cleanup & made things to document his robots... showed a diagram / for interconnections... Carl Ott 9:06 PM also discussed rationale for system architecture - e.g. why have QtPy for data collection as a middleman between RPi and several sensors... Carl Ott 9:08 PM ~9:06pm- John K showed a 3D Printed Klann Linkage Walker https://www.thingiverse.com/thing:4971263 Carl Ott 9:09 PM also showed a jumping robot https://www.thingiverse.com/thing:4976714 Carl Ott 9:13 PM

~9:12pm - Michael Ivison- recently retired - built a new metal shed / man-cave - will be building more robots in it...

Carl Ott

9:15 PM

@michael - some EMI enclosure materials <u>https://www.3gshielding.com/?gclid=CjwKCAjw-</u>

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<u>wE</u>

Chris N 9:16 PM Its getting late for me.... See you all next week! Pat Caron 9:17 PM See you next week! Carl Ott 9:19 PM ~9:17pm- Carl asked about the OAK--D.LITE camera / on Kickstarter - whether / why to pick fixed focus vs. auto-focus... https://www.kickstarter.com/projects/opencv/opencv-ai-kit-oak-depth-camera-4k-cv-edge-objectdetection/description Thalanayar Muthukumar

Thalanayar Muthukumar 9:31 PM Need to drop