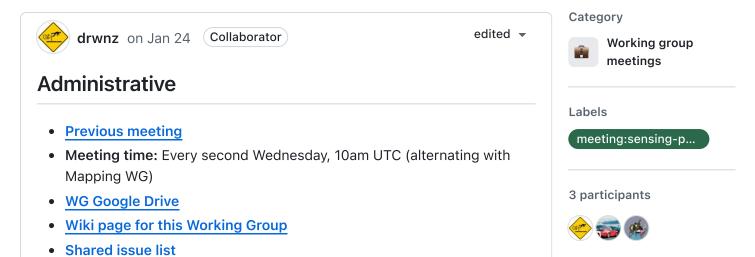


Autoware Sensing Perception Working Group Meeting 2024-01-24 #4116

drwnz started this conversation in Working group meetings



Attendees

▼ Chaired by David

Agenda

- Introduction of new attendees
- Review of Issue List and assignment
- · Review of Project Board and assignment
- Nebula update from Mehmet/David
- Sensing Perception pipeline performance Investigate end-to-end delay in sudden obstacle braking response autoware.universe#5540 (comment) from Berkay

Discussion topics

- Master task/objective spreadsheet from Mitsudome-san
 https://docs.google.com/spreadsheets/d/1z0KEc7-WRRCtnOjB3pXYT-vxg_Vy67jBzmpOAAzsC5w/edit?usp=sharing
 - Will use project board for managing issues coming in from community
 - Fine-grained tasks managed by task spreadsheet
 - Overall objectives will be managed by master spreadsheet, updated by the other two
- Review of <u>Issue List</u> and assignment
- Review of Project Board and assignment
 - ML-based object prediction

- To-Do: create github issue (Miura), Uetake can present next WG meeting
- o General To-Do: add issues for all items in spreadsheet (all)
- About priority for point type let's add to high priority (David, Fatih)
- Nebula update
 - 11 feat: add ring based filter for velodyne tier4/nebula#69 from Mehmet
 - Currently uses three arrays: array for rings, array for start angles, array for end angles
 - David: parameterization needs some discussion but we can go ahead and merge now as a test case for usage
 - Mehmet: currently use rviz for selecting start and end angles, but can use interactive markers for each ring to determine exclusion zones
 - Fatih: also add documentation to help reviewers and users, so switch to draft until documentation added
 - David will assign reviewer once this is done
- % revert(perf_ring_outlier_filter): temporal revert for further investigation autoware.universe#6148
 - This update to ring outlier filter, some rings are eroded and this affect point painting
 - Can be reverted no problem for now, but it does address bugs as well as optimizations so we should investigate and re-investigate
 - Fatih: please add data so we can test
- https://github.com/orgs/autowarefoundation/discussions/4112
 - Does anyone know why we have use-intra-coms and usepointcloud-container, can we remove?
 - Fatih: Currently passing pointcloud container name from launchfile to launchfile, should we just decide a name
 - David: if well documented, this would be easier to understand let's go ahead and approve proposal
- Sensing Perception pipeline performance Investigate end-to-end delay in sudden obstacle braking response autoware.universe#5540 (comment)
 - David: Effect of scheduling?
 - o Berkerey: Included in the 10 tests
 - Fatih: timestamps are passed down from sensing, so we lose information about when data is published. Should we add a timestamp array?
 - Could also have an "origin timestamp" or "creation date" for when the data was recorded
 - Miura: header timestamp to origin timestamp is useful for message filter
 - Fatih: everytime something modifies a message, a ledger could be stored to give complete ancestory for perception/prediction messages

