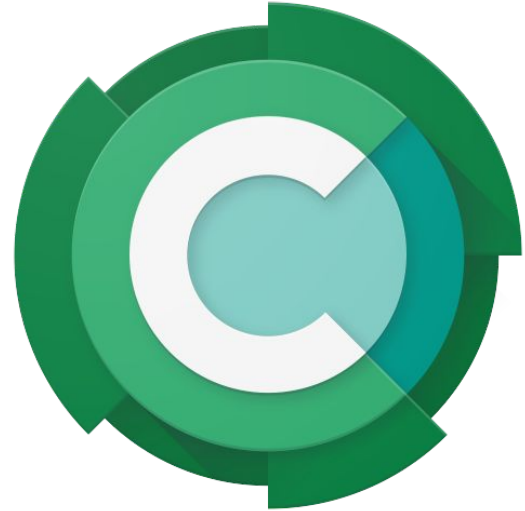


Cartographer Open House XV

February 22, 2018



What landed on master? • cartographer

- Landmark support (#896, #902, #901)
- Monitoring and metrics support (#908, #907, #906, #916...)
- Cleaning up namespaces (#917, #918, #922, #925...)

What landed on master? • `cartographer_ros`

- Publish Landmark markers for RViz. (#713)
- RViz settings for landmarks. (#717)
- Avoid auto for Eigen expressions. (#719)

What landed on master? • `point_cloud_viewer`

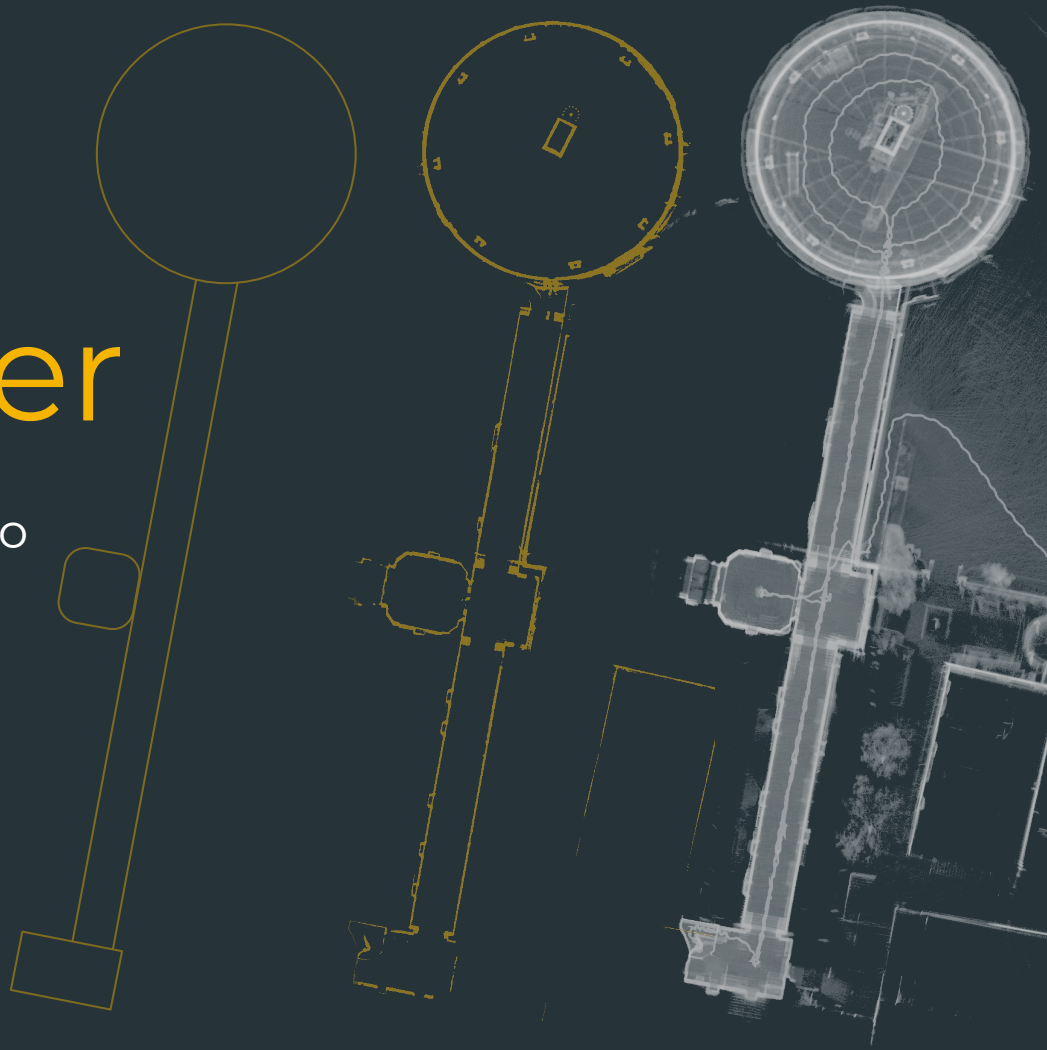
- Change to a faster hasher, which is not cryptographically secure. (#111)
- Add progress report for the subsampling state. (#113)
- Performance improvements in the SDL viewer. (#114)
- Remove level of detail as a concept. (#118)
- etc.

What landed on master / pending PRs? • `rfcs`

- Committed: RFC for monitoring. (#23)
- Committed: Serialization header RFC (#19)
- Pending: Add a pause/continue service to `cartographer_ros`
- Pending: Add code structure RFC.
- Pending: Add a monitoring bridge and interface to `cartographer_ros`

Cartographer

Landmark Observations Demo



Landmarks

semantic points in the global frame, e.g. QR-codes, markers, detected objects

Why?

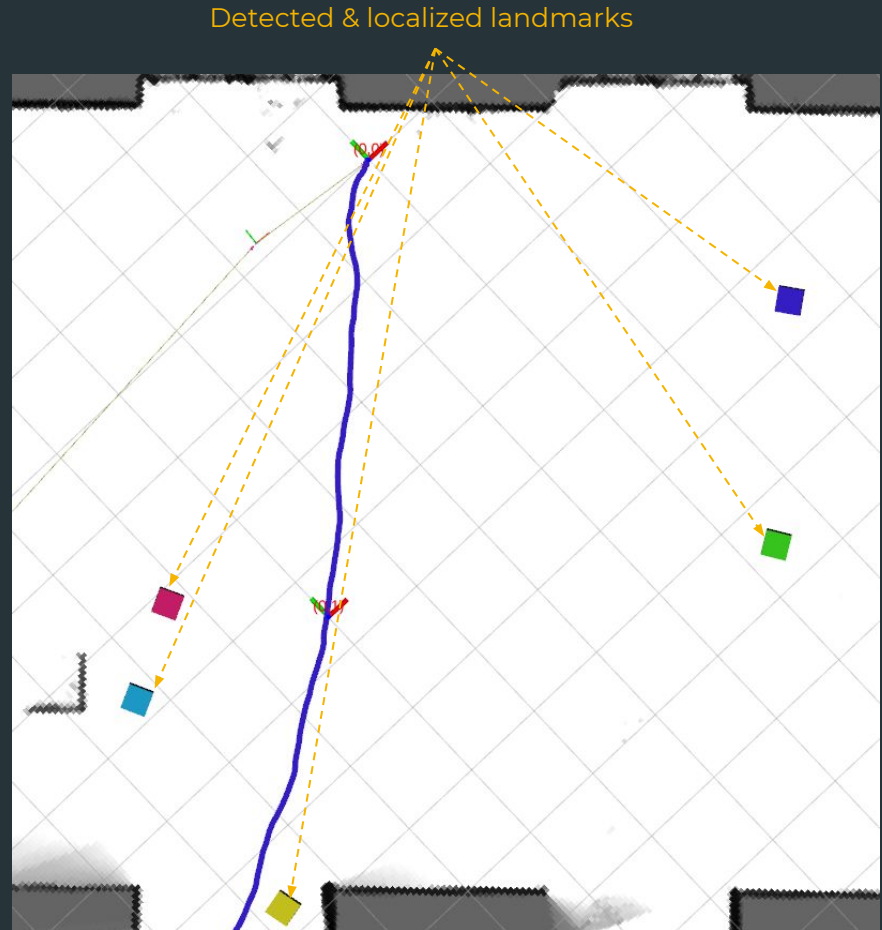
visual markers like QR codes are used in commercial workspaces to aid in robot localization

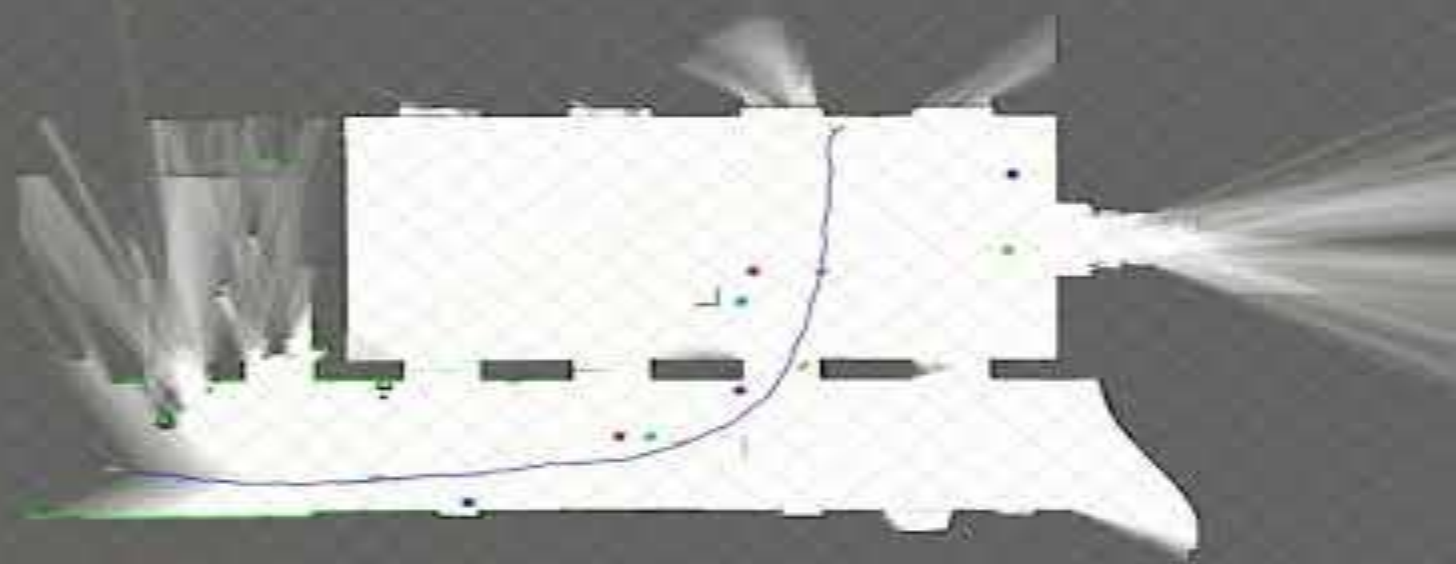
How?

use positions of landmarks relative to robots to improve global localization and mapping

Applications

- life-long mapping
- multi-robot SLAM





Current work

- Monitoring (more metrics)
- ROS integration for landmarks
- Cleaning up the code (namespaces, internal headers, code deduplication, unit tests)

Placeholder for other status reports

Thanks!

Next Open House:
March 8th, 5pm CET

If you would like to present anything next meeting, please reach out to
cschuet@google.com