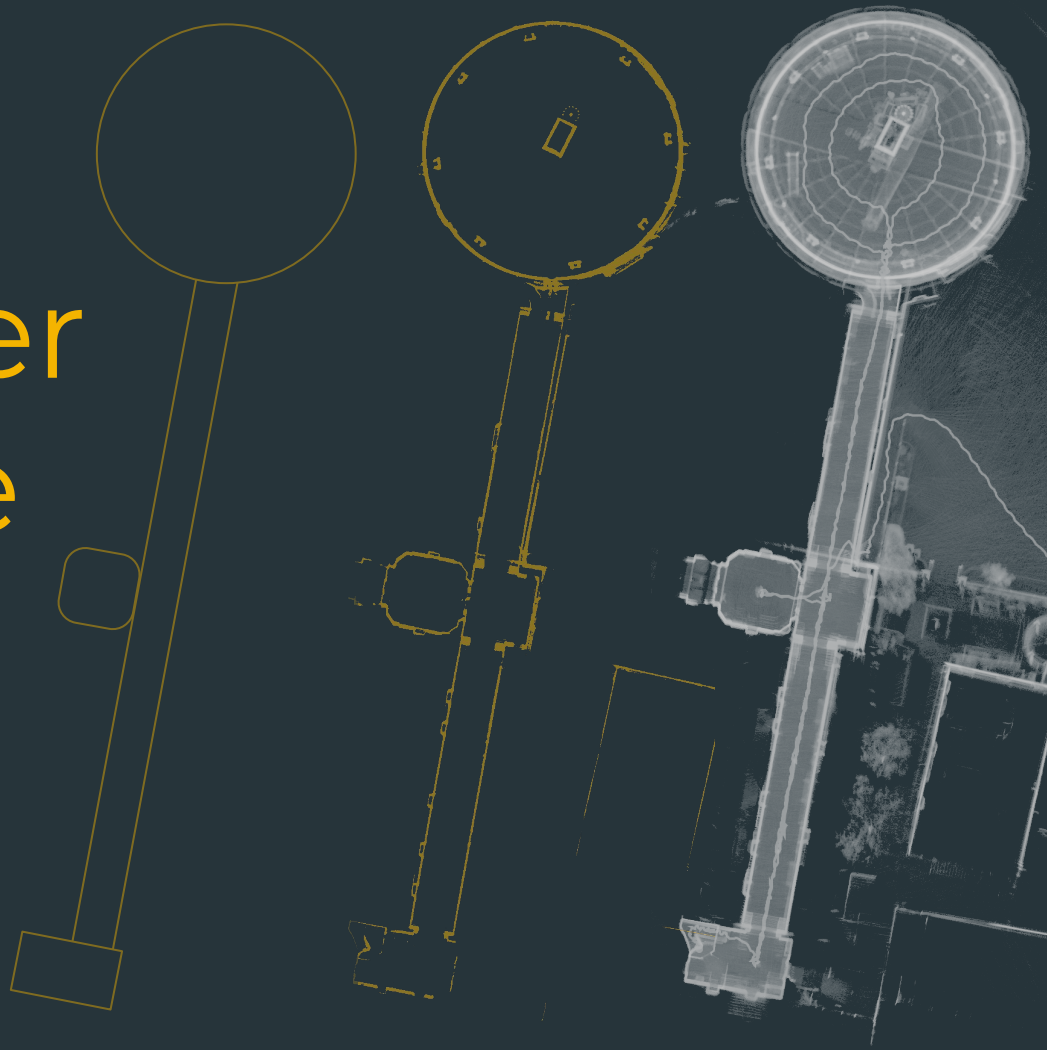


XXV

Cartographer Open House

16.08.2018



Evaluation pipeline

Kubernetes pipeline to evaluate Cartographer's performance

Infrastructure

- Docker files for evaluation pipeline (#18)
- Adding python script for creating k8s jobs (#19)
- Chunking up writes to big query (#21)



Abseil

Removed `common/mutex.h` with `common::MutexLocker`.

Reused `absl::Substitute`.

Cartographer

- Use `absl::Mutex` instead of custom implementation (#1356)
- [ABSL] Purge `common/mutex.h`. (#1369)
- [ABSL] Use `absl::Substitute` in `rigid_transform` debug messages. (#1373)

Cartographer ROS

- [ABSL] Use `absl::Mutex`. (#969)



[Timed]RangefinderPoint

Introduce [Timed]RangefinderPoint to be used throughout Cartographer instead of using Eigen::Vector3/4 directly ([RFC](#))

Cartographer

- Introduce [Timed]RangefinderPoint. (#1357)

Cartographer ROS

- Follow cartographer#1357 (#964)



Generic Pose Graph

Added local parameterization support.

Cartographer

- [GenericPoseGraph] Add parameterization. (#1385)
- [GenericPoseGraph] Add a macro to find nodes. (#1382)
- [GenericPoseGraph] Move functions that add param blocks



Tweaks and fixes

Removed common/mutex.h with common::MutexLocker.

Reused absl::Substitute.

Cartographer

- Use sourceforge mirrors for boost. (#1378)
- Various Bazel improvements (#1390)
- Move tools/bazel.rc to prepare for bazel 0.17 (#1375)
- Rename submap finished flags (#1384)
- Replace CHECK() by a warning in MapBuilderStub::SerializeState()
- Remove noisy logging from AddSensorDataBatchHandler (#1366)
- Skip constraint search against unfinished submaps. (#1362)
- Use Huber loss for landmark cost functions. (#1377)
- Graceful LocalTrajectoryUploader (#1381)

Cartographer ROS

- Adding option to launch without rviz, similar to 2d case (#972)
- Add include_unfinished_submaps parameter to SerializeState() (#966)



Current work

- Generic Pose Graph
- TSDF
- Robust gRPC uplink



Placeholder for other status reports



Thanks.

Next Open House:
August 30th, 5pm CEST

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

