Instructions to setting up the

Motion Tracking

Project

Easy Scalable, Low-Cost Open Source Magnetic Field Detection System for Evaluating Low-Field MRI Magnets using a Motion Tracked Robot

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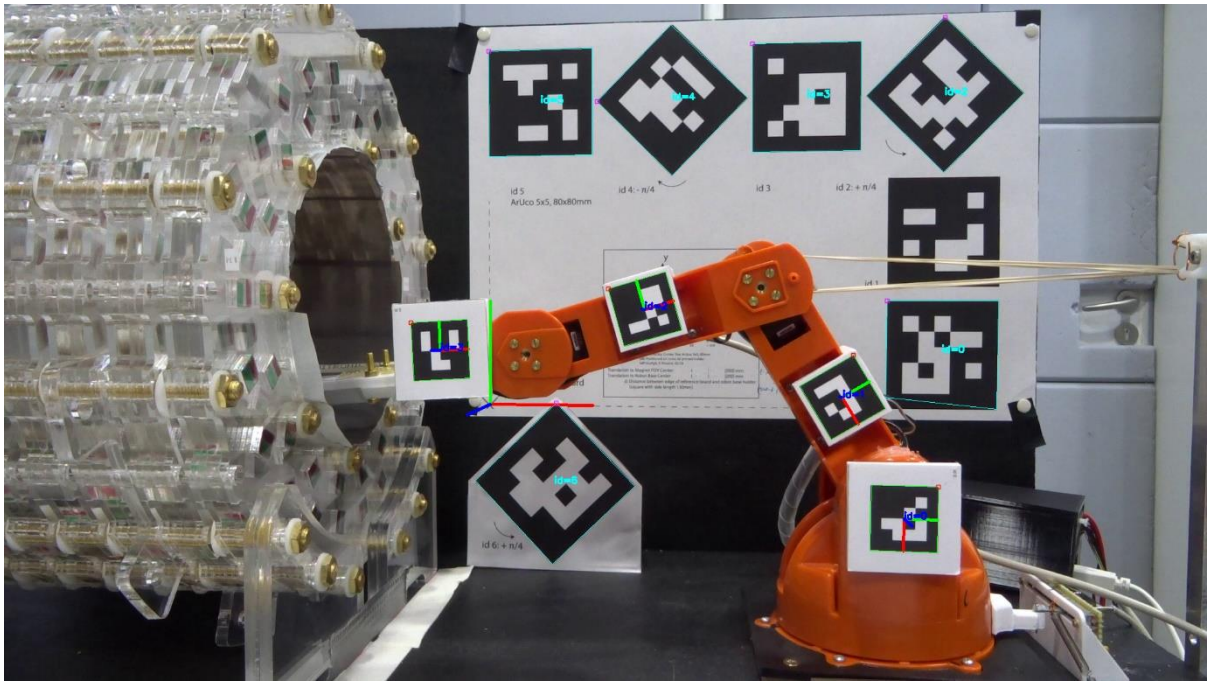

Content

1 Preamble

This manual is still a work in progress and will be completed in the next few weeks.
If you have any questions in the meantime, please feel free to ask

2 Hardware

2.1 ArUco Marker

2.1.1 Reference Board

2.1.2 Robot Marker

2.2 Checkered Board for Calibration

2.3 Assembly of the reference board / distances from one another

2.3.1 Backboard

2.3.2 extra Mounting ID6 Reference

2.4 Setup Camera

3 Calibration

3.1 Video Recording

3.2 Calibration in Post Processing

3.2.1 SetUp Software (Update Parameter)

3.2.2 Run Software

4 Motion Tracking during Mapping

4.1 Video Recording

4.1.1 During Measurement

30min limit

4.1.2 Prepare Video Files for following Motion Tracking

4.2 Analysis in Post Processing

4.2.1 Update SetUp File

4.2.2 SetUp Software (Update Parameter)

4.2.3 Run Software

5 Outlook

So far, motion tracking has been done in post-processing.
This can be extended to include motion tracking during runtime
-> significant acceleration of the analysis compared to post-processing analysis.

…. explain out first working attempts