

Assessment of the bachelor thesis by Tinatin Verdzeuli

InLoc Visual Localization for ARI robot

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bachelor thesis supervisor

The goal of the thesis was to review InLoc visual localization, the ARI robot software environment, implement access to the existing InLoc functionality from the ARI robot environment, and demonstrate and evaluate InLoc localization on data provided by an ARI robot.

Chapter 2 of the thesis reviews the background on ARI robots and InLoc localization. The Review is concise but sufficient to introduce the necessary background and to demonstrate that Tinatin was able to grasp the main concepts. Chapter 3 of the thesis describes the implementation of the module interfacing InLoc to the ARI ROS software environment via a client-server architecture. This was the desired approach and it has been successfully implemented and tested in simulations. Chapter 4 very briefly touches on the testing of the interface. Unfortunately, due to the limited functionality of the robot as well as InLoc itself, it was not possible to fulfill all goals and to really evaluate the InLoc localization functionality.

Tinatin Verdzeuli presented a functional implementation of the InLoc interface to ROS on an ARI robot. She has also demonstrated that she can exhibit standard engineering work. She satisfactorily fulfilled the first two items in the thesis assignment. The third item was fulfilled only partially but it was caused by the limited functionality of the ARI robot and InLoc implementation, which was planned to be provided to Tinatin by the supervisor. Hence I believe that the goals that could have been achieved were satisfactorily achieved.

I grade the thesis as *satisfactory (D)*.

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