Assisted arm navigation

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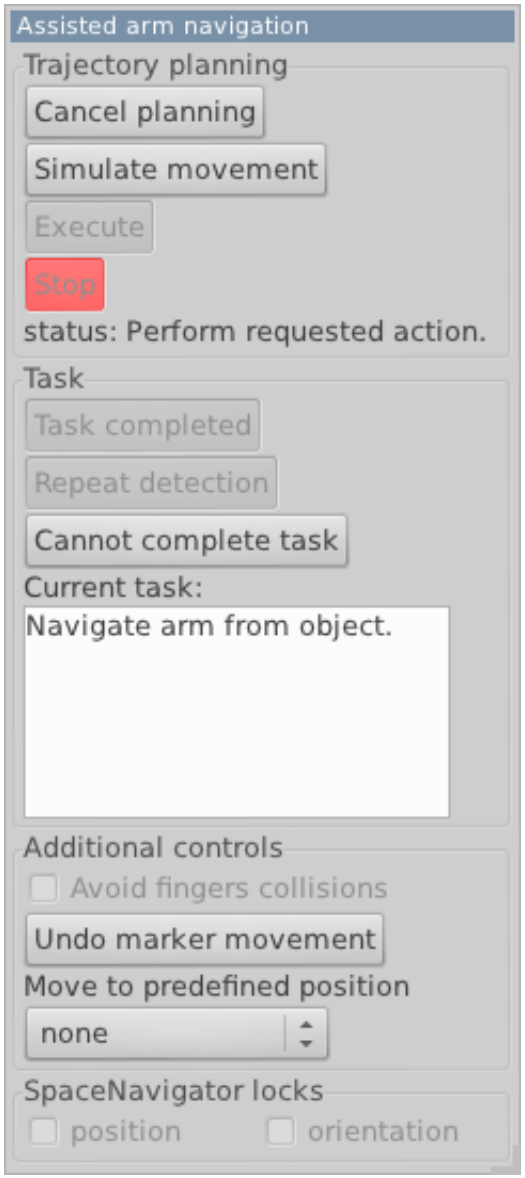

- Simple user interface for non-expert users.
- Developed within SRS project (srs-project.eu), for manipulation tasks which can't be solved autonomously.
- Complete pipeline for telemanipulation, including grasping.
- Based on functionality of arm_navigation stack.
- Collision free arm planning using our 3D environment model based on Octomap.

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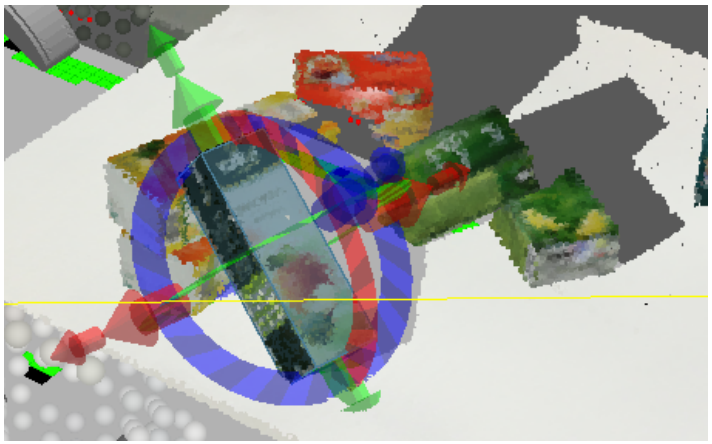

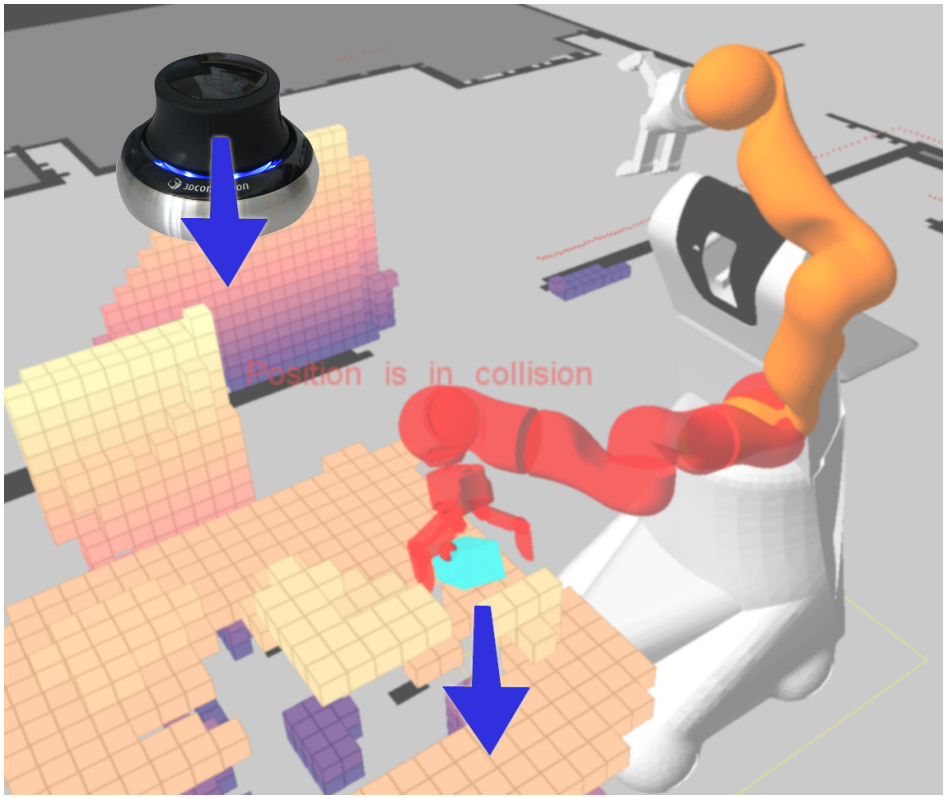

- Simple and intuitive user interface.

- Stereoscopic display (patched RVIZ) for improved depth perception.
- Usage of 6 DOF mouse (SpaceNavigator), non-linear sensitivity.
- Considering position of RVIZ camera when moving virtual end effector.

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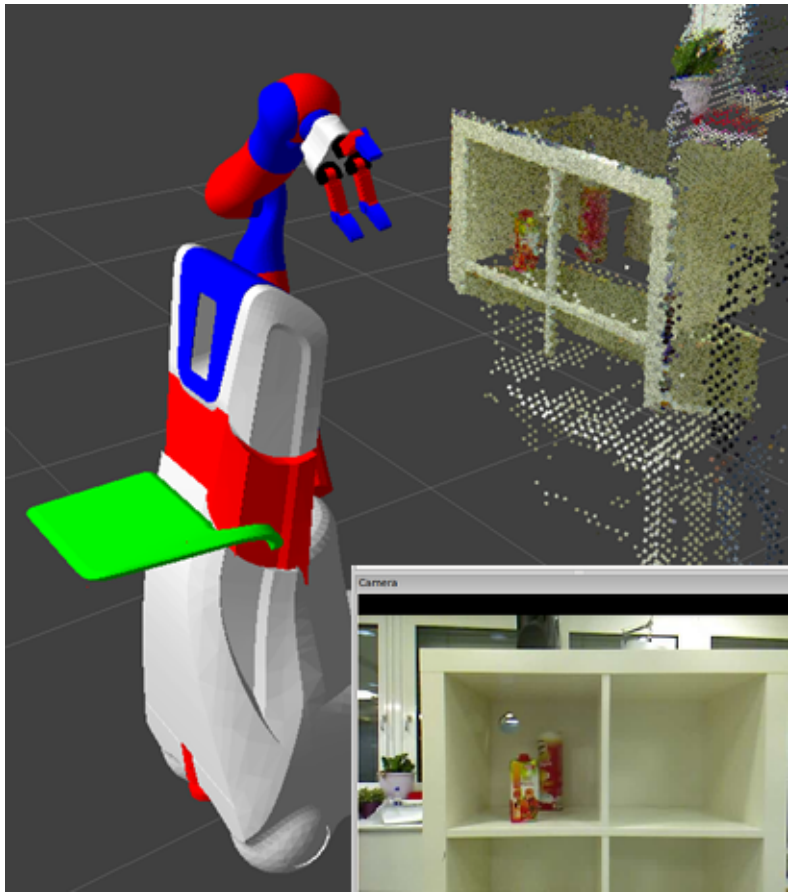
- Extensively tested during a large users study (BUT, HDM, IPA). Results comming soon - performance when using stereo/non-stereo.
- Works with ROS Electric, update for Groovy in progress.
- Well tested with Care-O-Bot, adaptable for any robot.
- What it offers? Simple GUI for arm manipulation. Action interface for giving tasks to a user, services for background communication.



www.ros.org/wiki/srs_assisted_arm_navigation