Master's Thesis

Closing the sim-to-real gap using haptic teleoperation

Simulation is a good way of investigating the possibility of a complex behavior implementation for service robots. Since we can not consider all the characteristics of the real work scenario there would be the sim-to-real adaptation step in order to fine-tune the current learned skill from simulations. In this project, the scenario will be the liquid pouring tasks which we already learned in a simulation environment. We will tackle the sim-to-real adaptation problem using haptic communication in order to demonstrate and skill for extra time and the robot will use the expert user knowledge in order to fine-tune the current learned skill from the simulation.

Prerequisites

Be familiar with skill refinement techniques.

Be familiar with haptic teleoperation

Strong background in c++

String background in python

Contact

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Advisors

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