Hand motion retargeting for dexterous manipulation imitation in v-rep

Problem description:
Grasping object with a dexterous hand is a complex task. One way to achieve autonomous dexterous manipulation is through learning by demonstration [1] [3]. To achieve learning by demonstration, a framework is required to capture human hand pose [2] and map human hand pose to robotic hand pose. In this Forschungspraxis, the student will implement such a framework in a simulation environment, where the tasks include:

Work schedule:
- Research and create a robotic hand model in v-rep simulation environment.
- Implement the mapping from robotic hand pose to human hand pose [1].
- Integration and test of all components

Bibliography:

Supervisor: Shile Li
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(D. Lee)
Univ.-Professor