

Ego-Centric Perception Stream

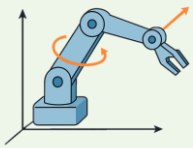
(Quest 3)

TCP Port, Async Packet [26 Hand Poses, Left/Right]

Arm Data Module



Arm Wrist Tracking



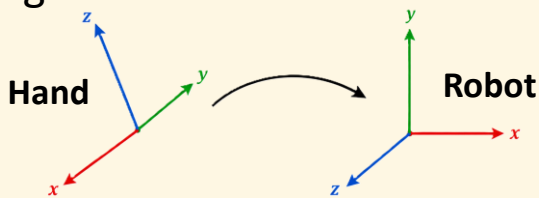
Analytical IK Solver

q_{arm} (6 DoF)

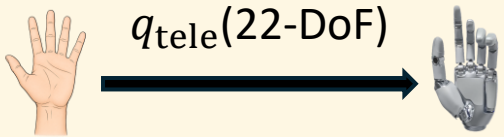
Finger Retargeting Module

Wrist Normalization

Align Wrist to Neutral Robot Frame



Dexterous Hand Retargeter



Trajectory Aggregator

Combined Articulation Targets

$[q_{\text{arm}}, q_{\text{tele}} + \Delta q]$



Force Balance Controller



Output: Δq (Corrected Action Delta)

Action Execution

Fingertip Force
&
Contact Points

Isaac Sim / Real Robot

with interactive objects in the environment

