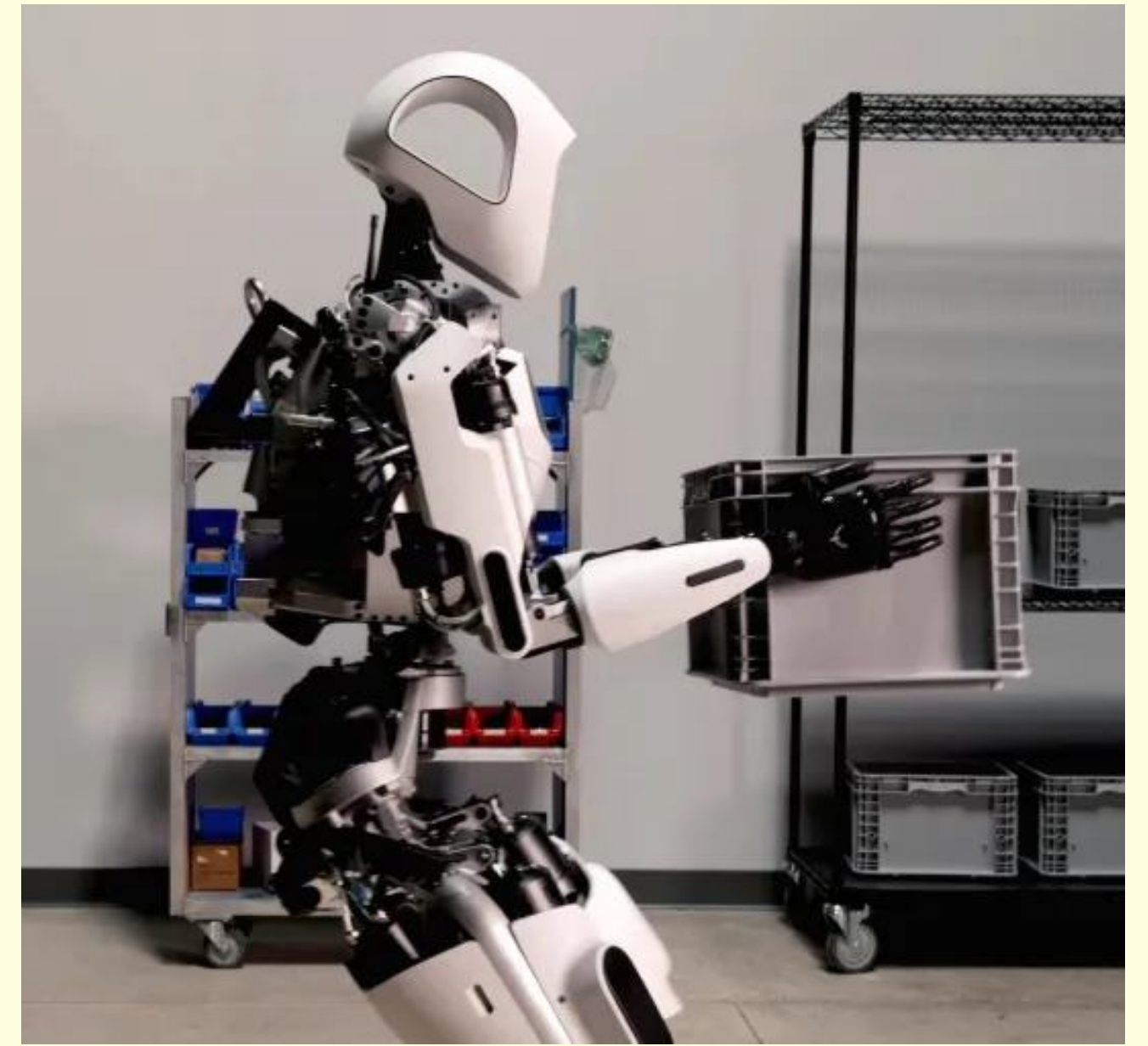
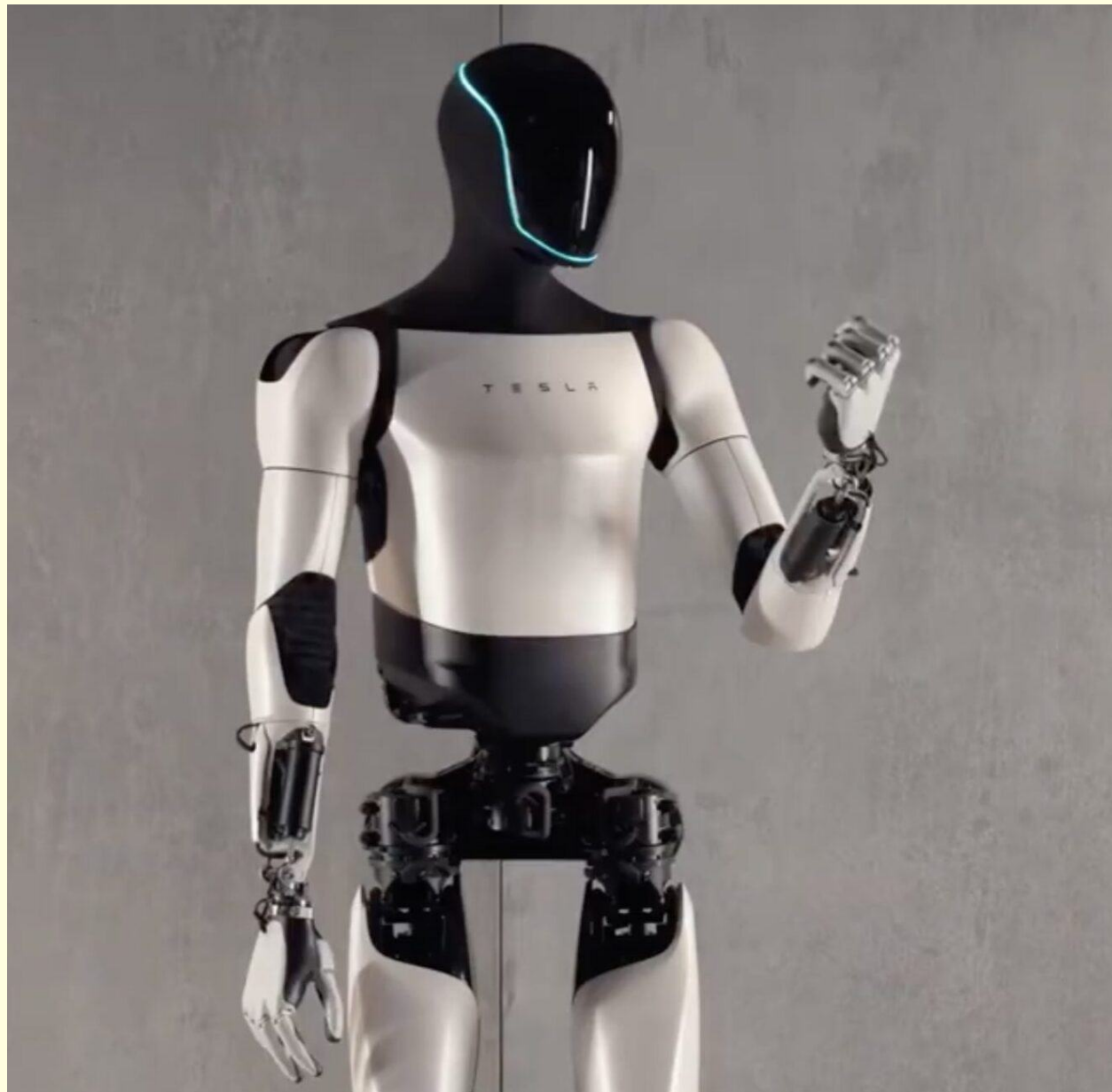


universal manipulation interface

humanoid collective vol 1

what is
humanoid collective 🥕



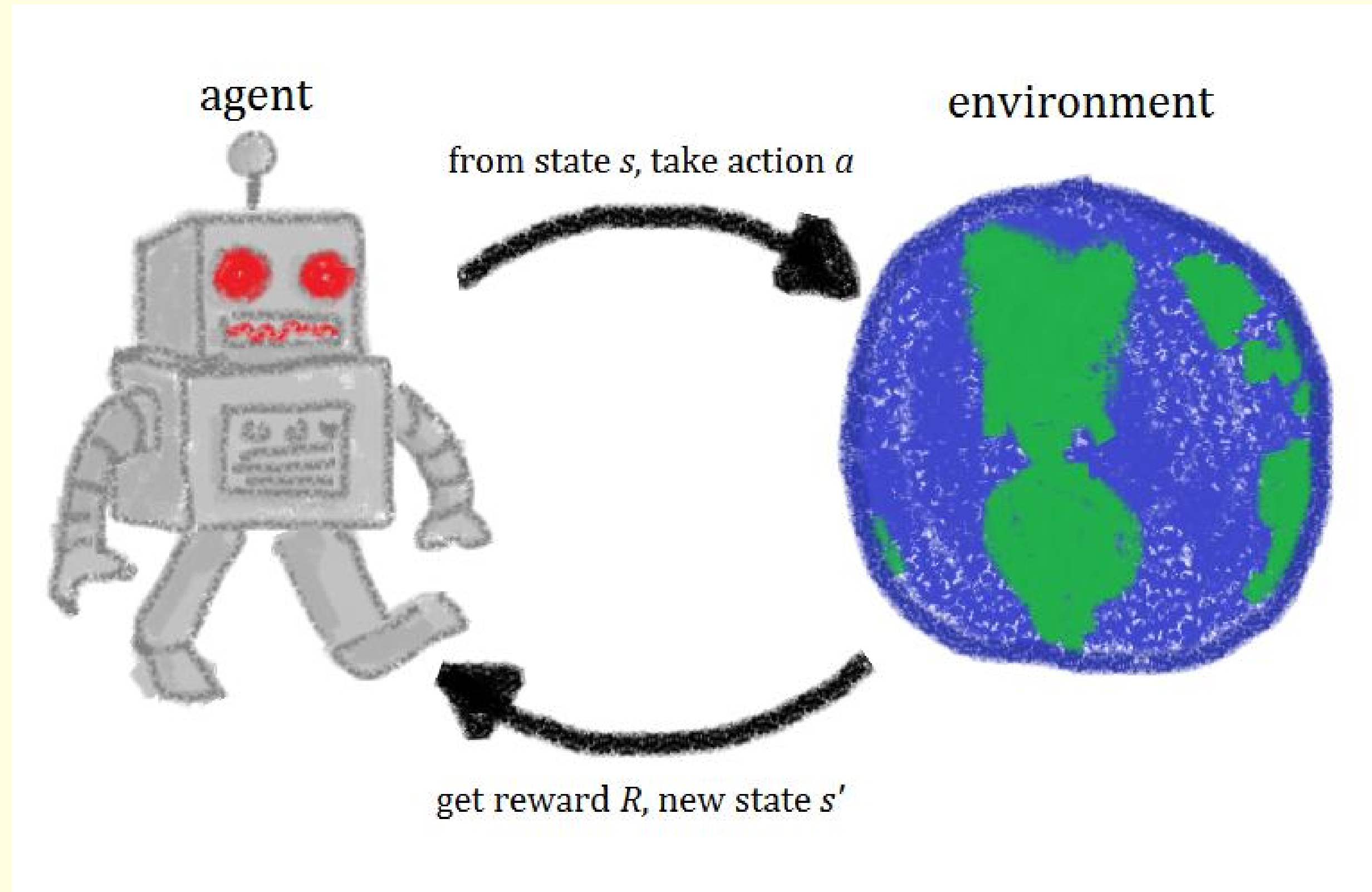
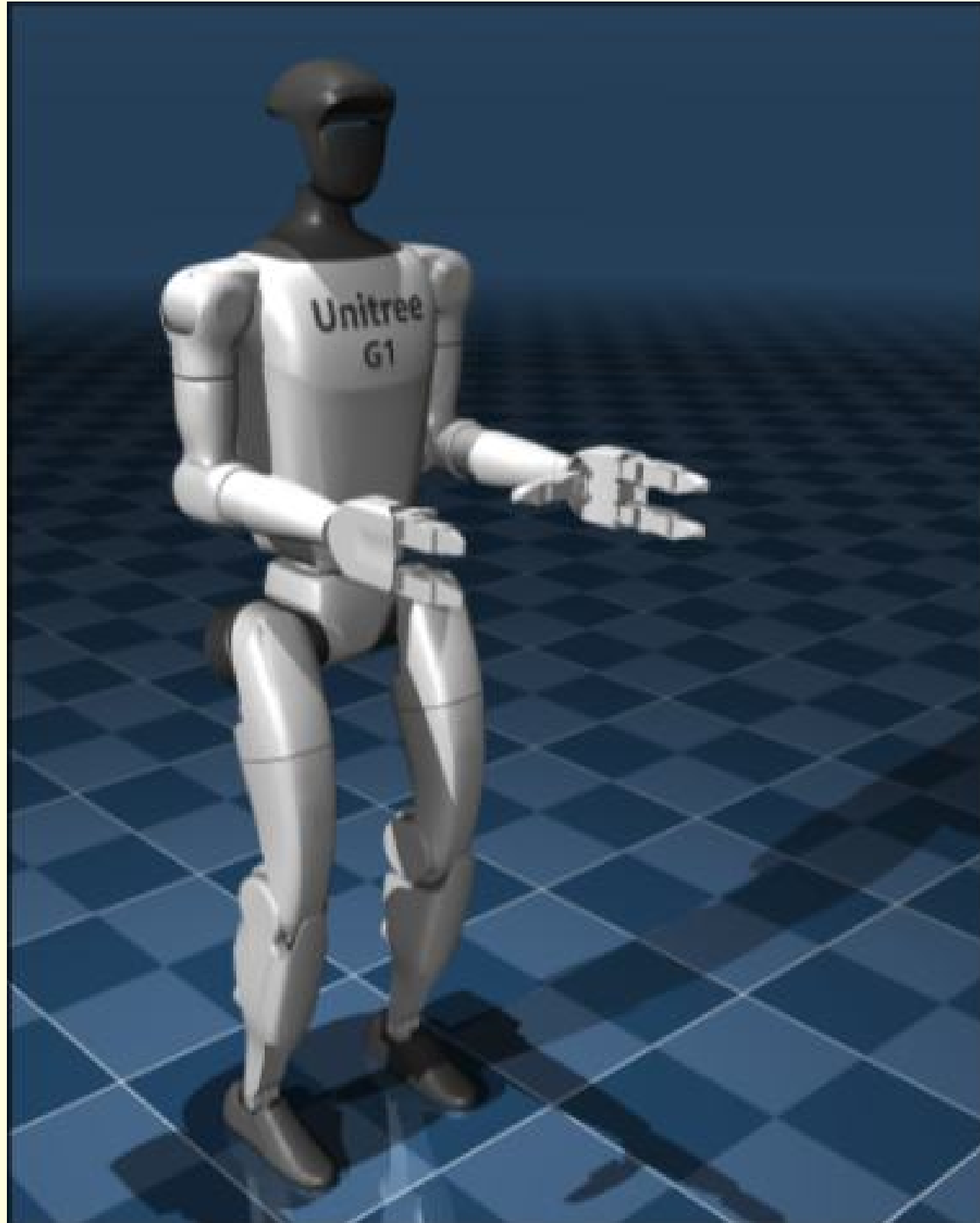
- weekly paper reading group
- reproduce and expand on research
- build some hardware

how do
robots learn?

imitation learning

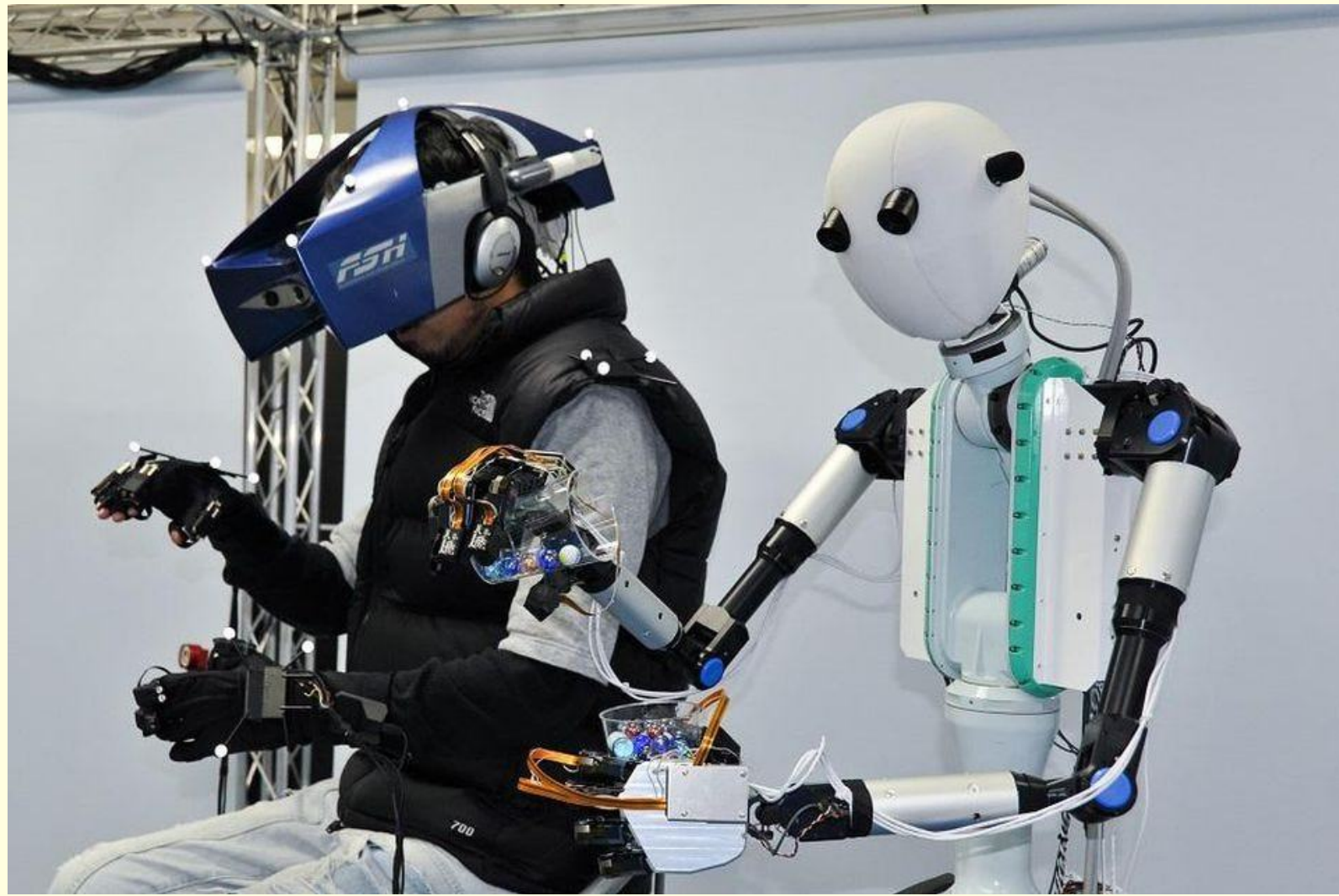


reinforcement learning (RL)

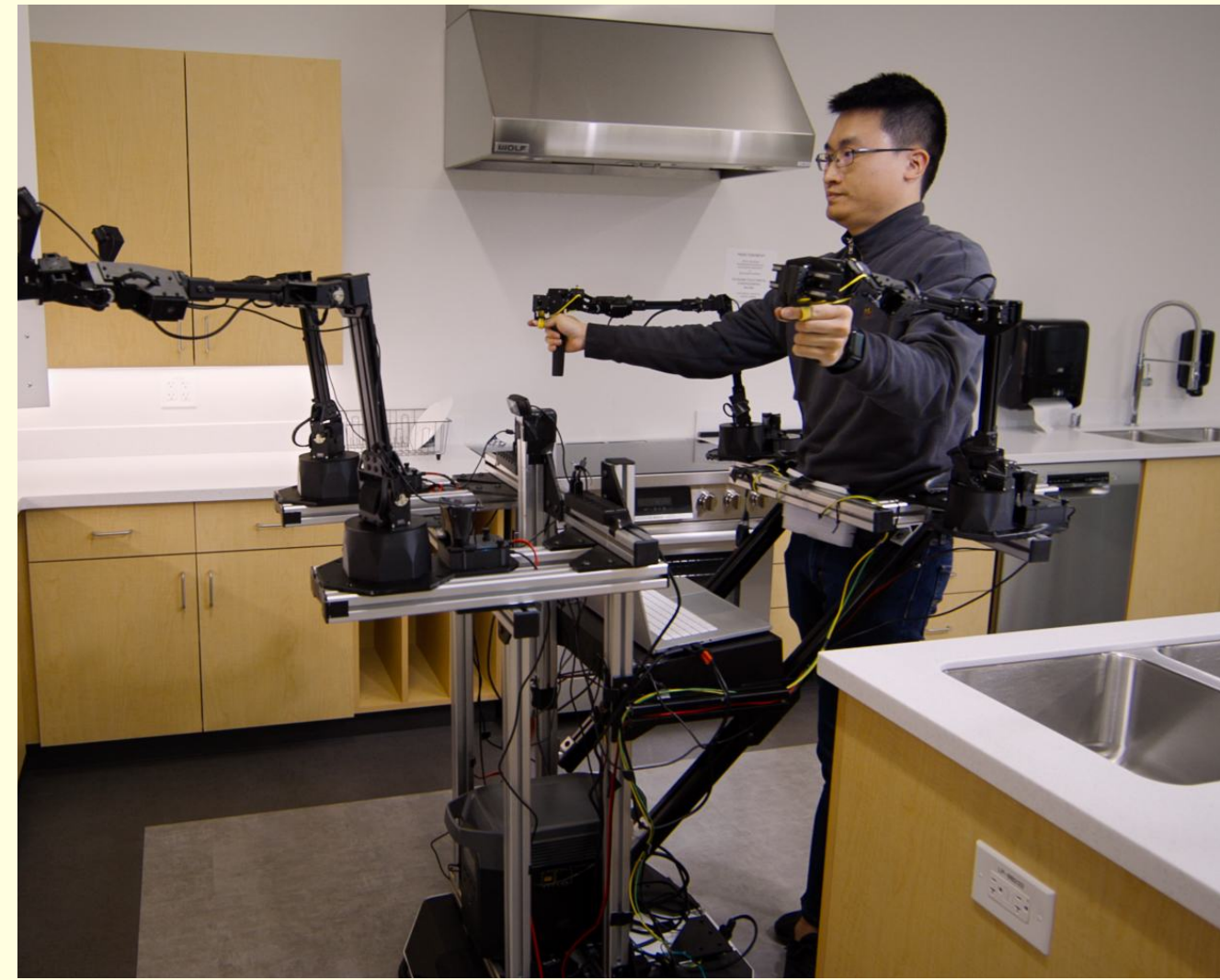


how do
you teach robots?

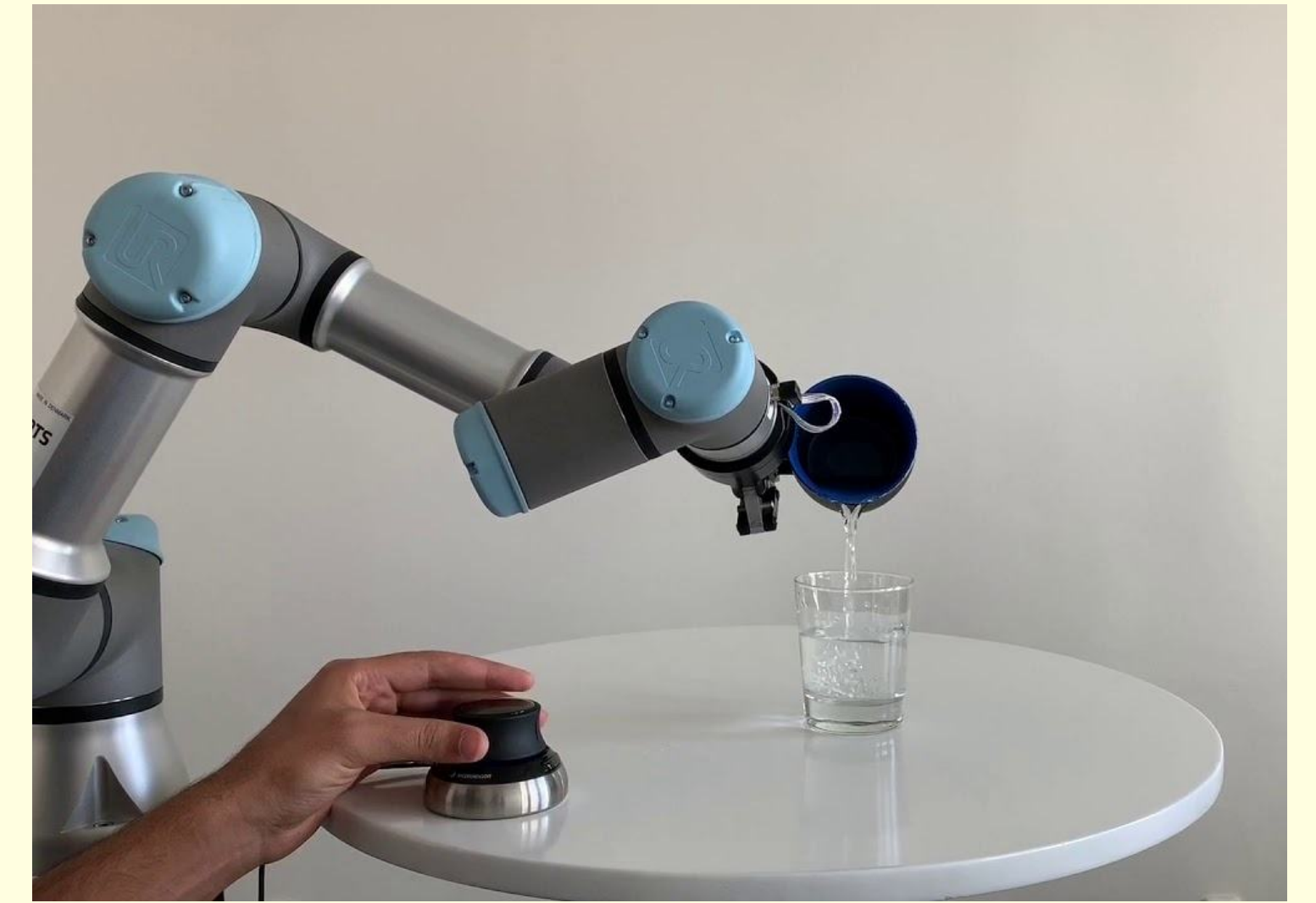
teleoperation



VR teleop



puppeteering



spacemouse

video data



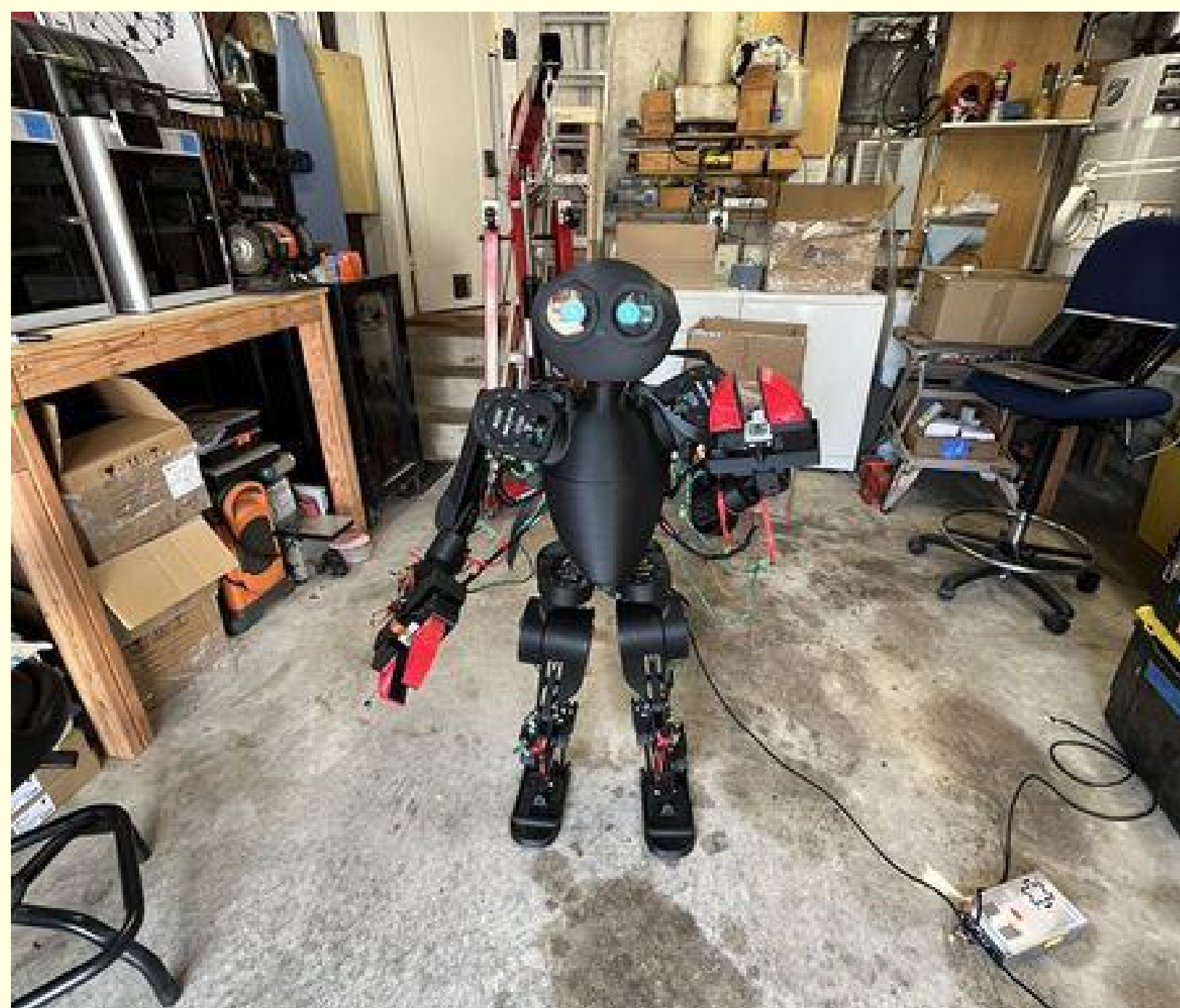
read the paper



<https://umi-gripper.github.io/>



<https://arxiv.org/pdf/2402.10329>



K-Scale Labs (YC W24)



Sensei Robotics (YC S24)

goals

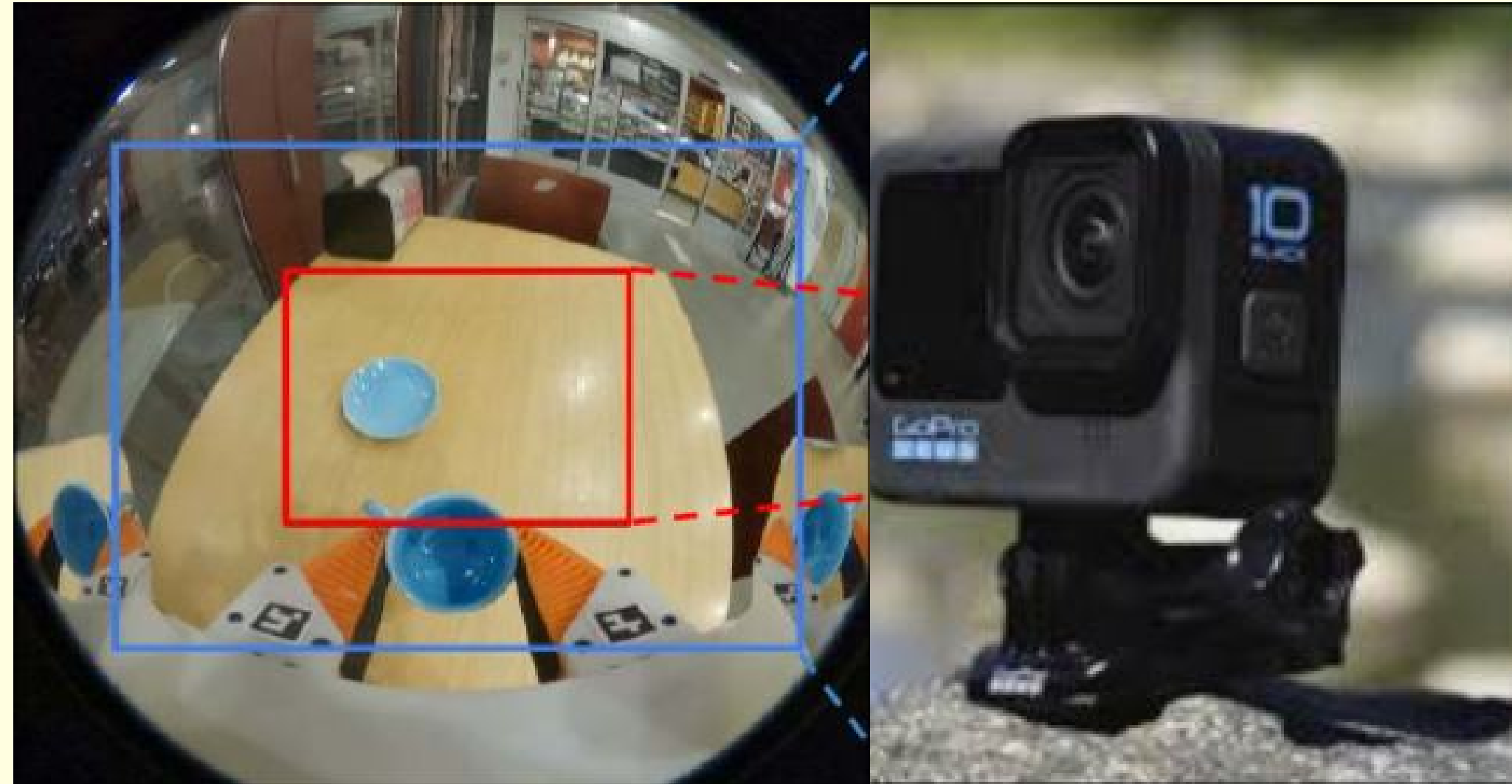
a low cost and intuitive data collection platform

generalizable to any hardware

the hardware



3D printed parts

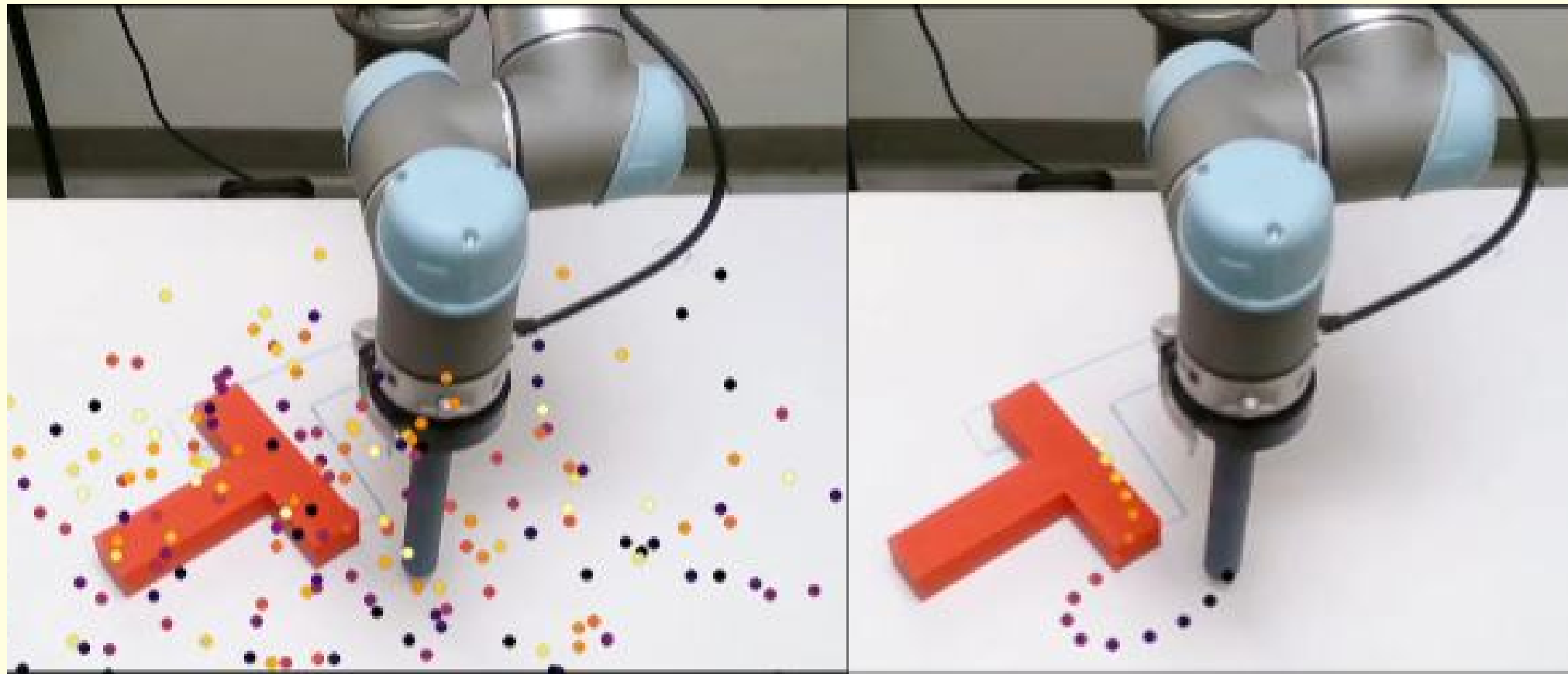


GoPro with fisheye lens

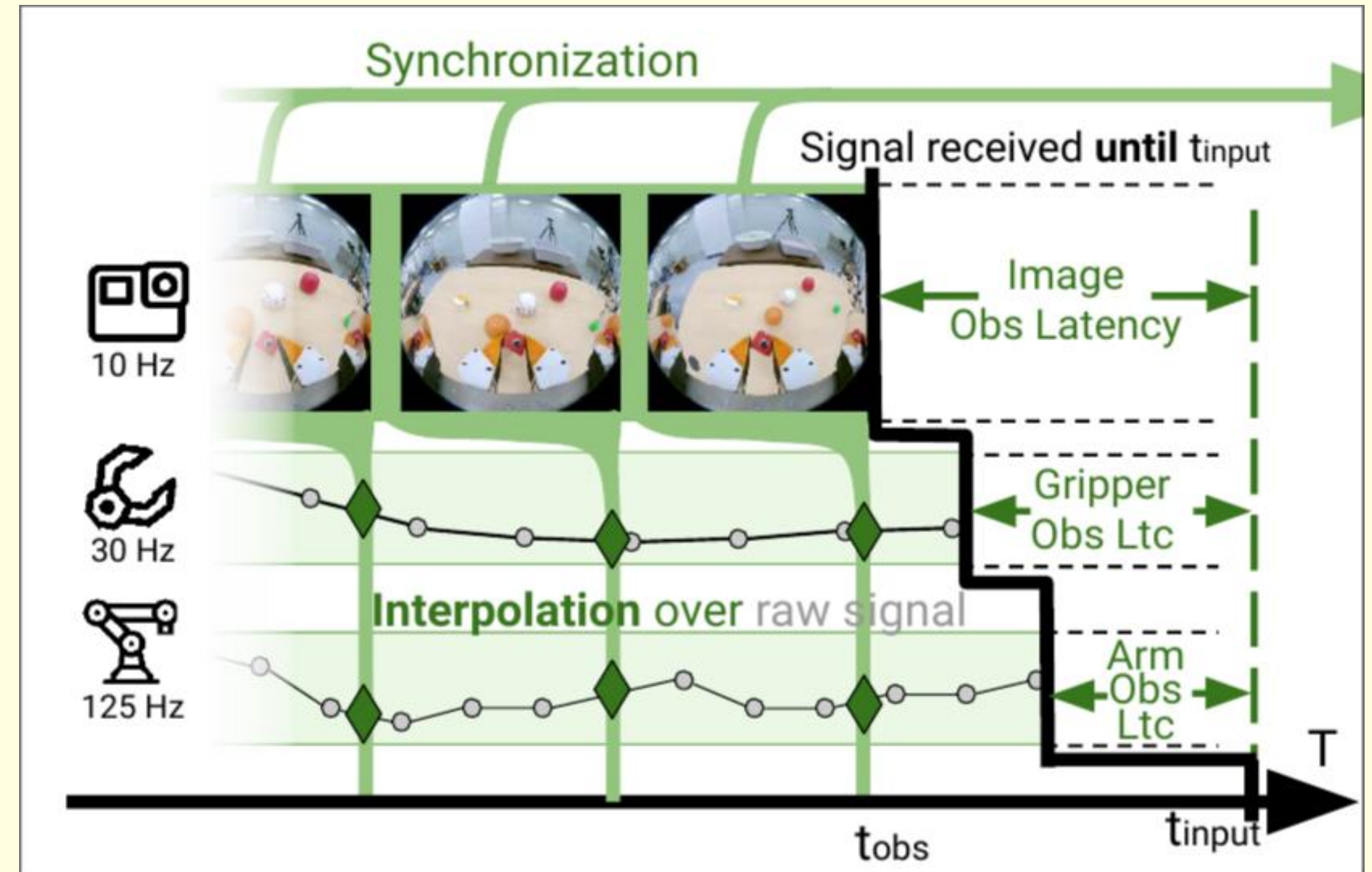


mirrors for stereo vision

the software

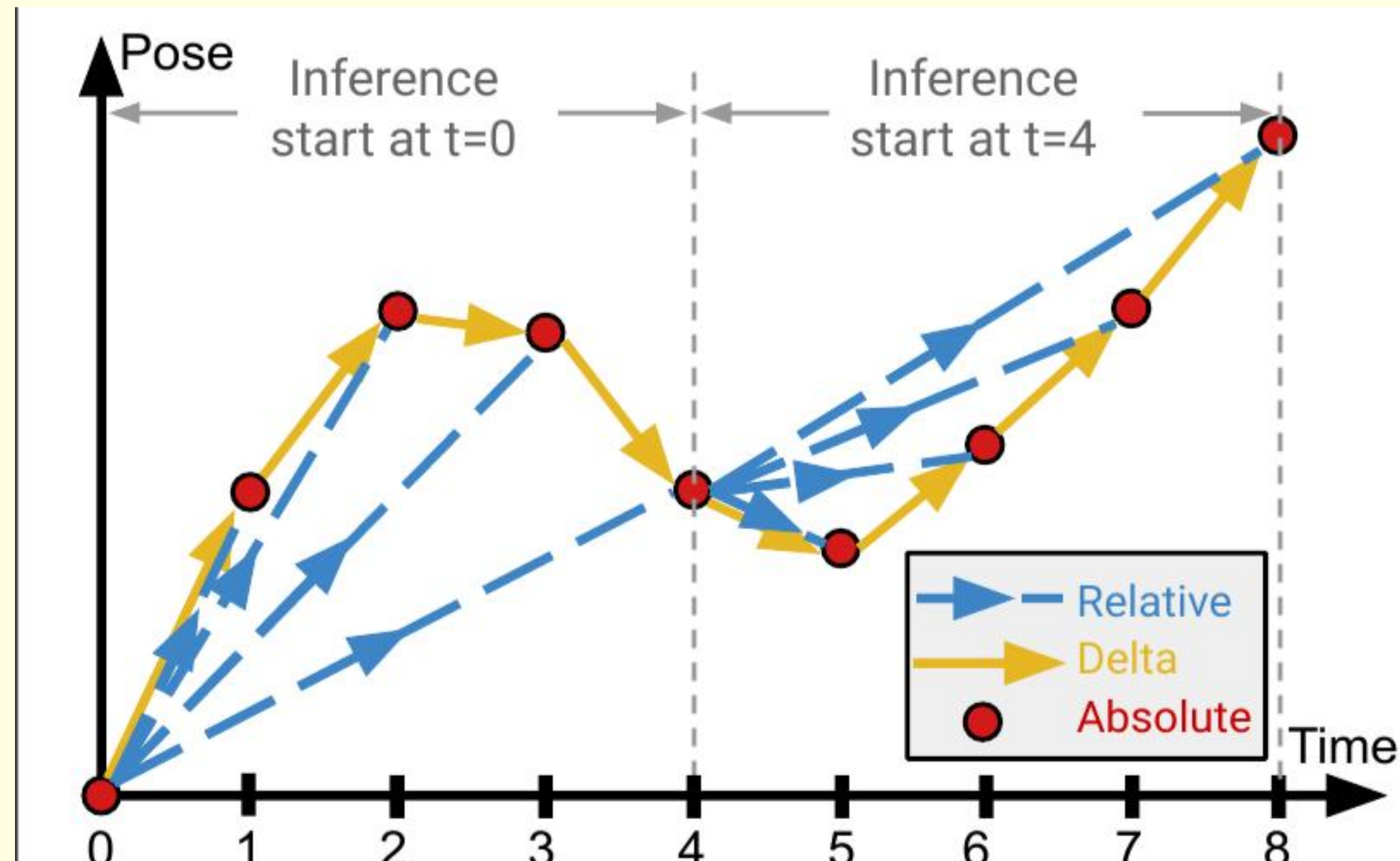


diffusion policy

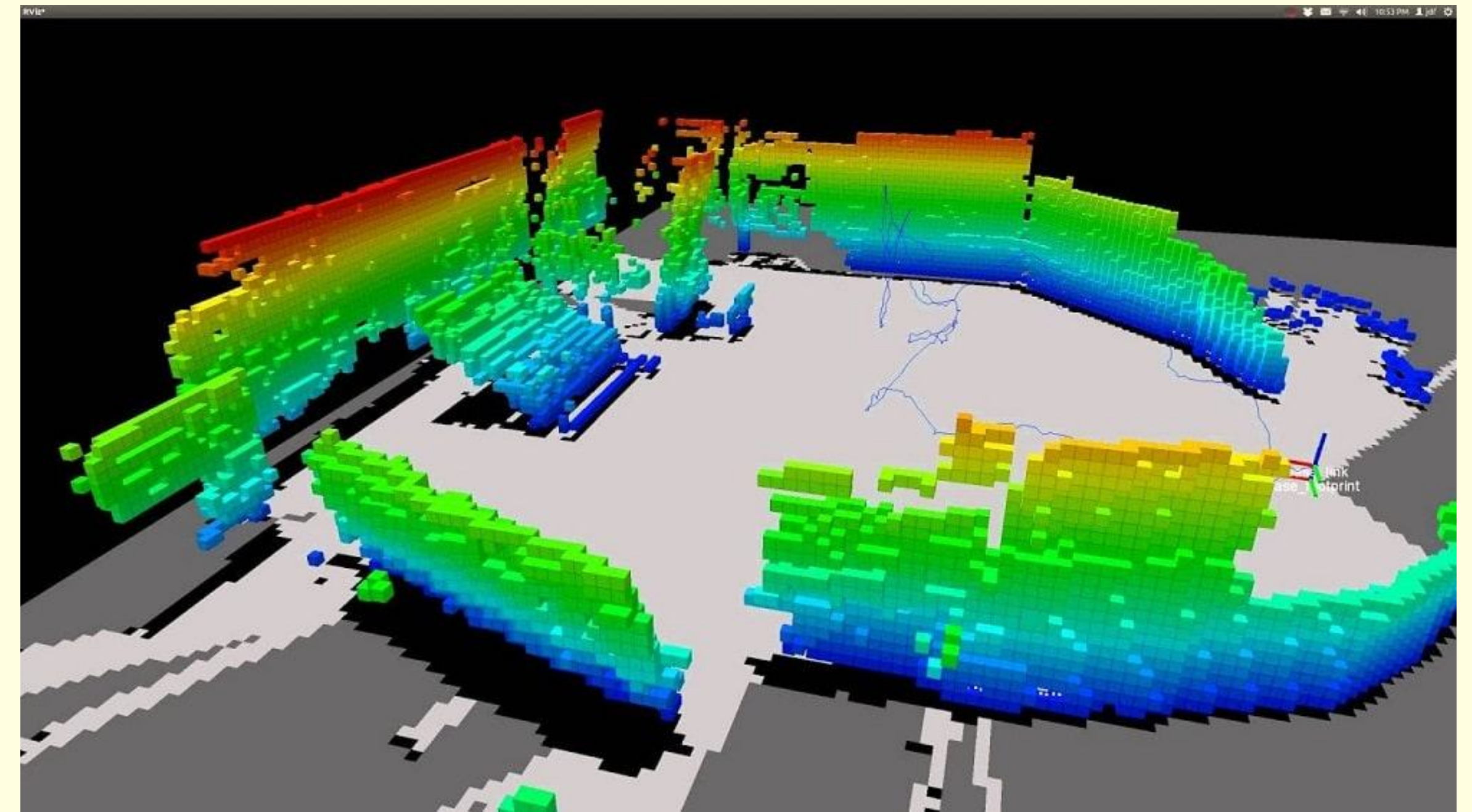


latency matching

the software



relative action trajectories



SLAM for localization

training



collect a lot of diverse data, in a lot of places

evaluation

