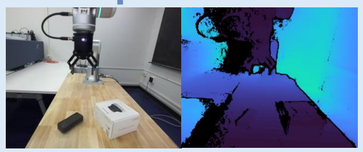
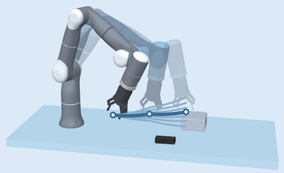
Objective Programming

Task Specification



Task: Place the eraser on the box and release it.

Digital Twin via Real2Sim



Cost Library

- $r = |\ \|p_a - p_b\|_2 - d\ |$
- $r = \|p_a - p_b - \Delta\|_2$
- ...

VLM

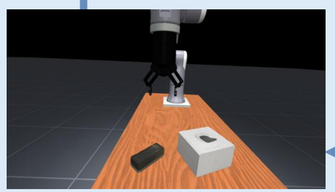
Update

Objective program $\mathcal{P}$

Stage 1 → Stage m → Stage M

- Running costs
- Terminal costs
- Stage completion thresholds

Feedback



MPC + Stage Verifier

Sim Execution

Real-World Execution

MPC + Stage Verifier

Synced Digital Twin



Stage 1 → Stage 2



