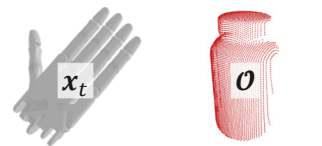


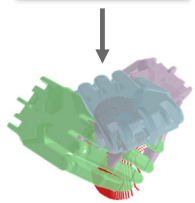
# Arm-Agnostic Grasp Model

Input

Noisy Hand  $x_t$     Object Input  $\mathcal{O}$



Diffuser  $\times T$

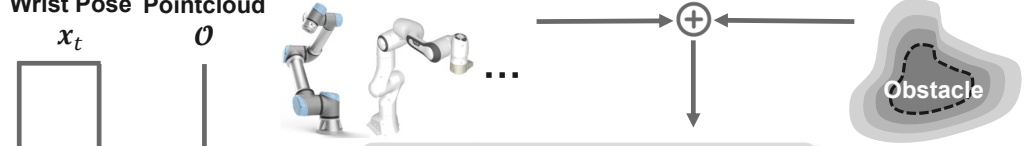


Grasp Pose

# Arm-Aware Dexterous Grasp Generation

Input

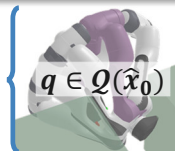
Noisy Wrist Pose  $x_t$     Object Pointcloud  $\mathcal{O}$     Arm Kinematics    Environment SDF



Collision Avoidance  $f_{\text{colli}}(q)$   
Hand Reachability  $f_{\text{reach}}(x, q)$   
Joint Proximity  $f_{\text{joint}}(q)$

$\times \lambda_{c,t}$   
 $\nabla g(\hat{x}_0) = \nabla f_x(\hat{x}_0, q^*)$

IK Solver



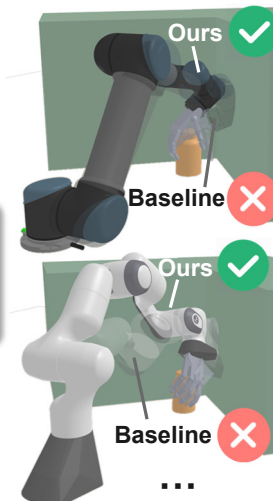
minimum point of loss  $q^*$   
predicted wrist pose  $\hat{x}_0$

$x_{t-1}^{\text{DDIM}}$

$\nabla g(\hat{x}_0)$

denoised wrist pose  $x_{t-1}$

Output



feasible arm-hand pose  $(q^*, x_0)$