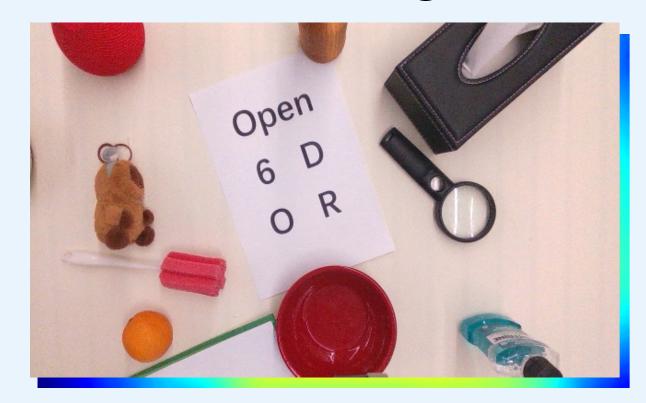
### Inputs

### **RGB-D** Image



#### Instruction

Place the capybara on top of the paper labeled "Open6DOR", with the capybara facing frontwards.

## **Task Preprocessing Module**

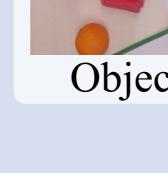
Grounded SAM

paper ]

[ red bowl ]

[capybara]

GPT-4V







Target Object RGB Image

# 3D-aware Position Module



3D Object Point Clouds Object Centroids & Bboxes



Sim.-assisted Filtering

Large-scale Sampling

**Mesh Reconstruction** 

Simulation-assisted Rotation Module

# Sim.-assisted Planning Module

Goal Position

Goal Rotation

Scene Point Cloud





**Motion Planner** 



Generated Traj.