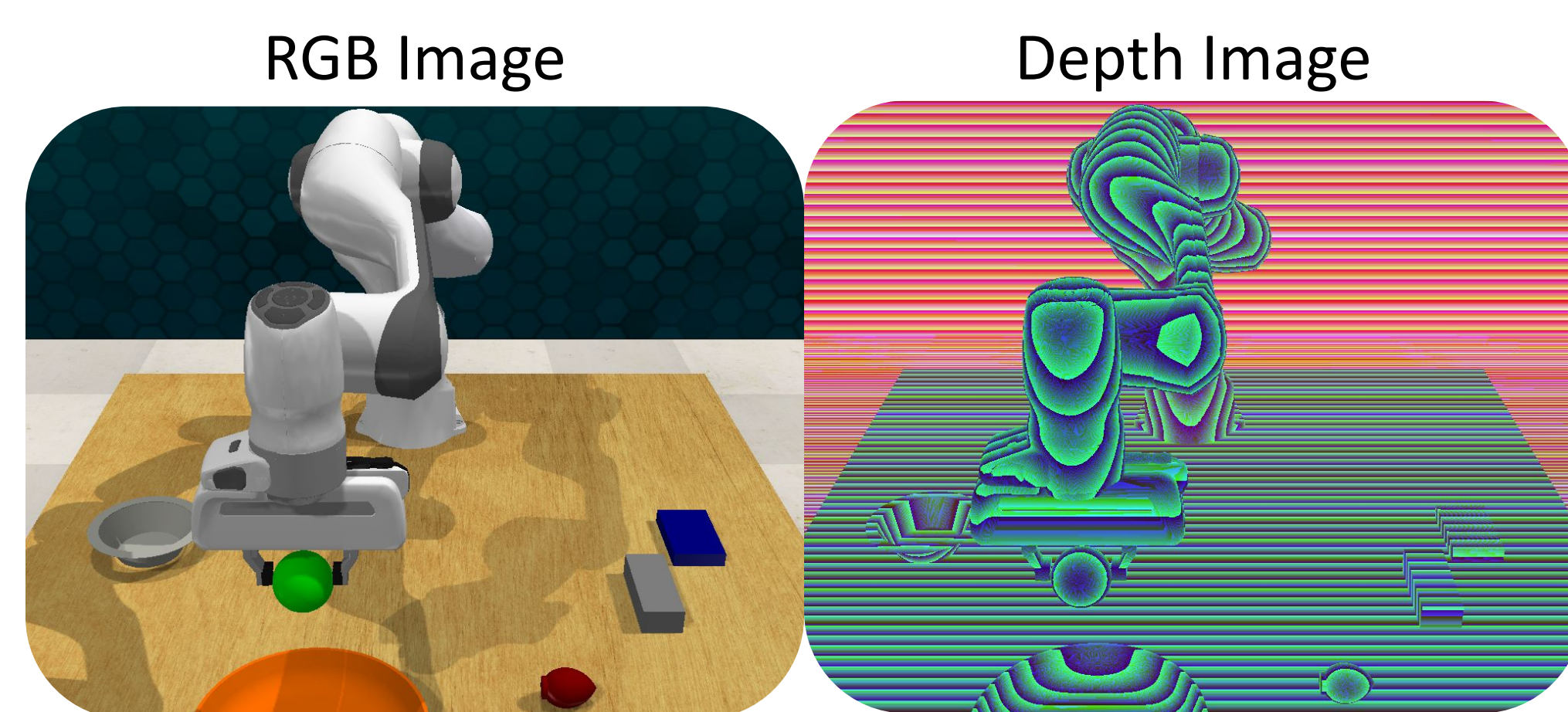# Language Conditioned Imitation Learning

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Introduction

We explore language conditioned imitation learning for tabletop robot manipulation in simulation (RLBench) and real life (UR5e)
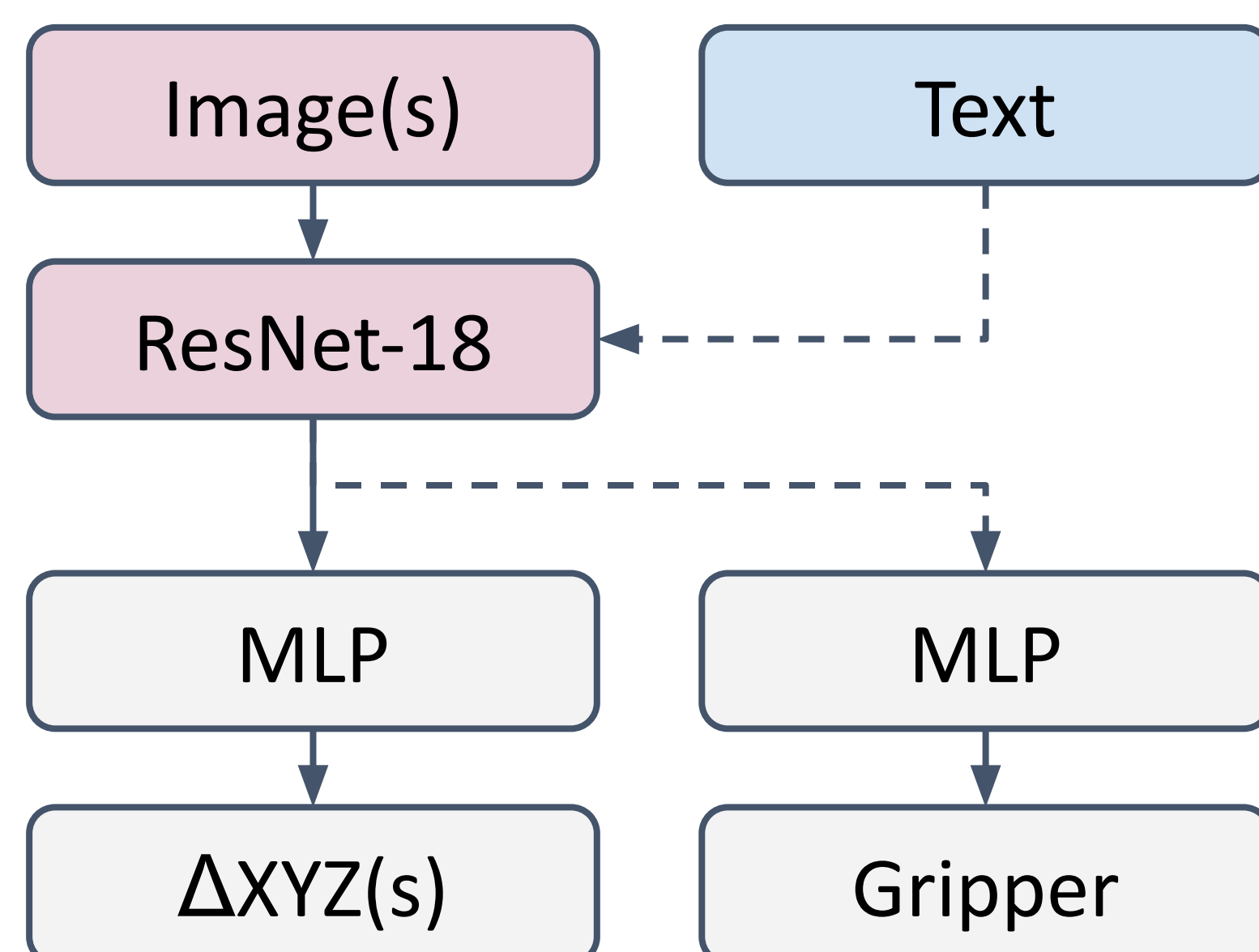
Input

RGB Image   Depth Image

"Put lime on orange plate"

Output
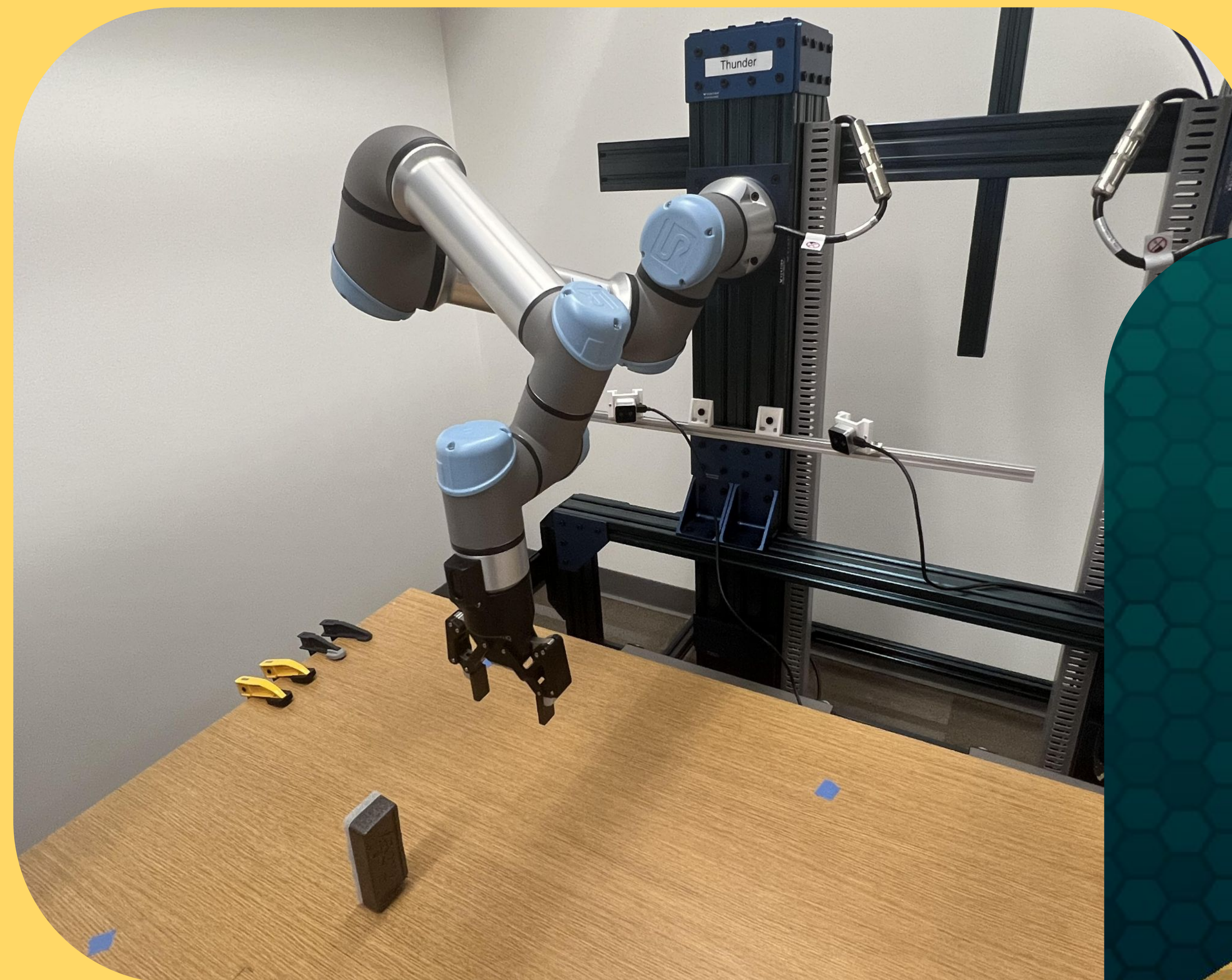
ΔX, ΔY, ΔZ, and Gripper State

Network

Data

Image-action pairs from scripted demos
- Simulated Franka with RLBench
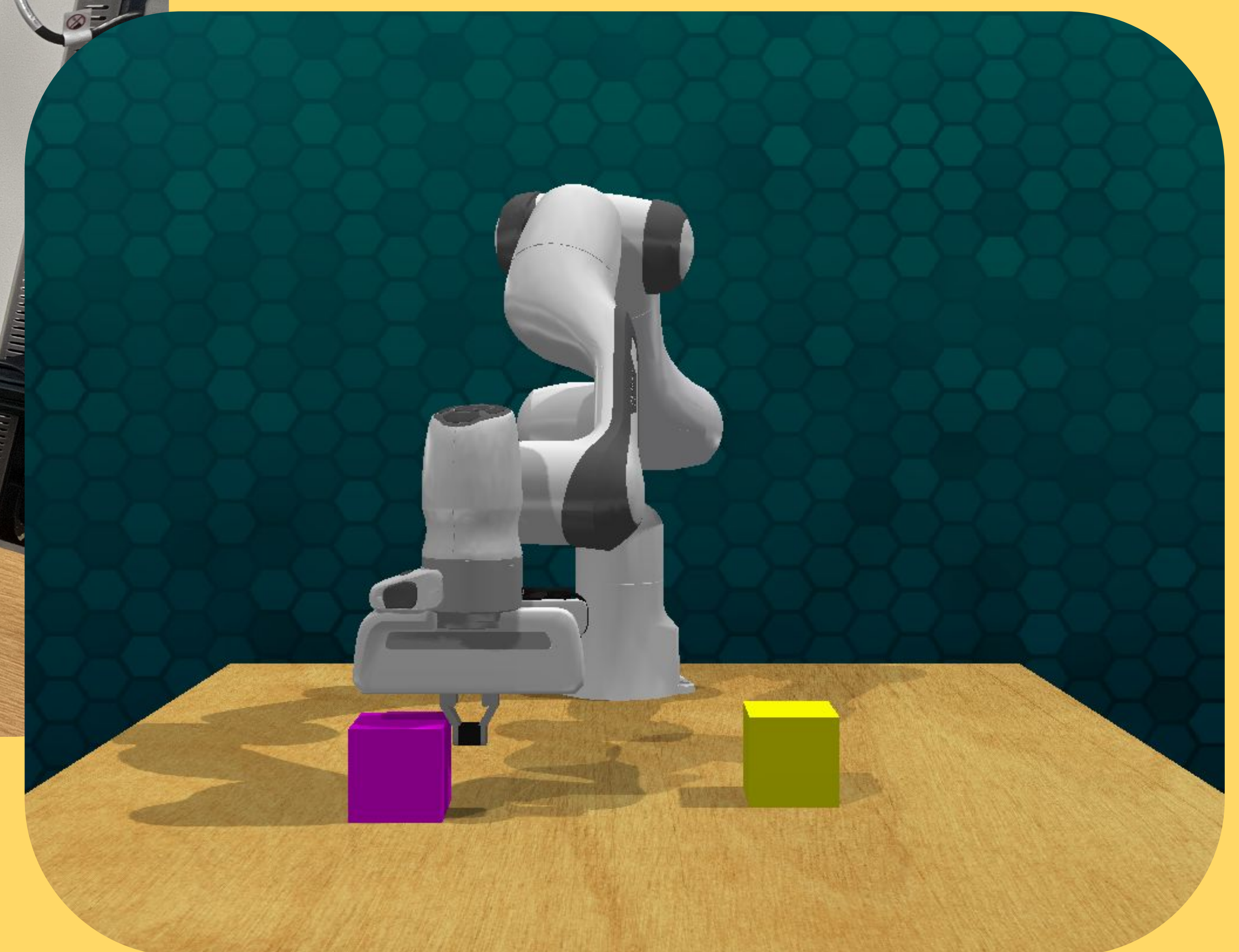- Real UR5e with Interactive Marker

BC-Z: Zero-Shot Task Generalization with Robotic Imitation Learning
Jang et al. CoRL 2021

Robots Can Perform *Unseen Tasks* with *Language* Conditioned *Behavioral Cloning*

"Knock over the eraser"

"Push the magenta block left"

66% Success Rate on Seen Tasks
26% Success Rate on Unseen Task

Other Tasks

computer science & engineering

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