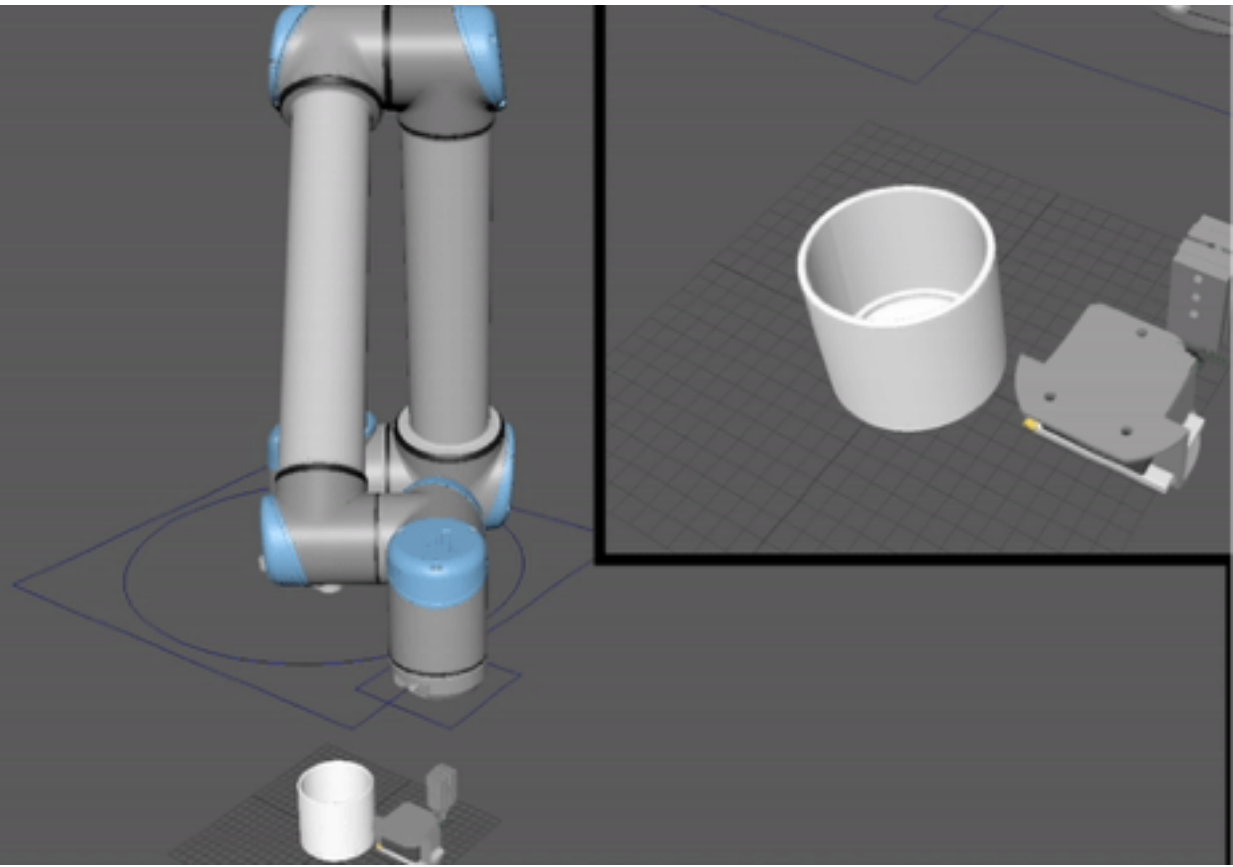




AUTODESK.

RESEARCH

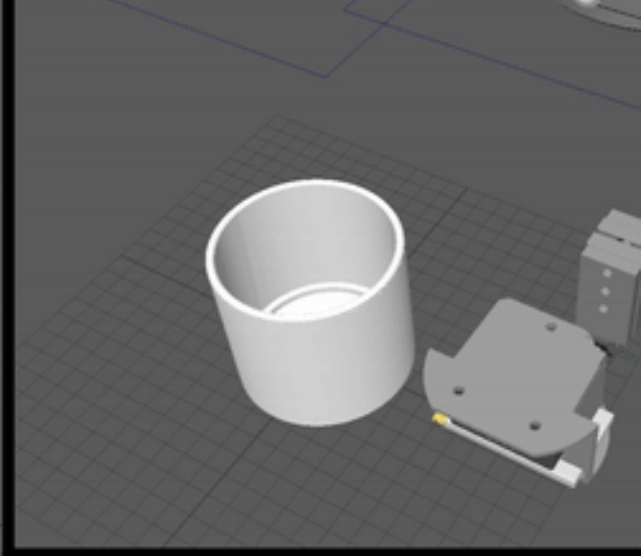
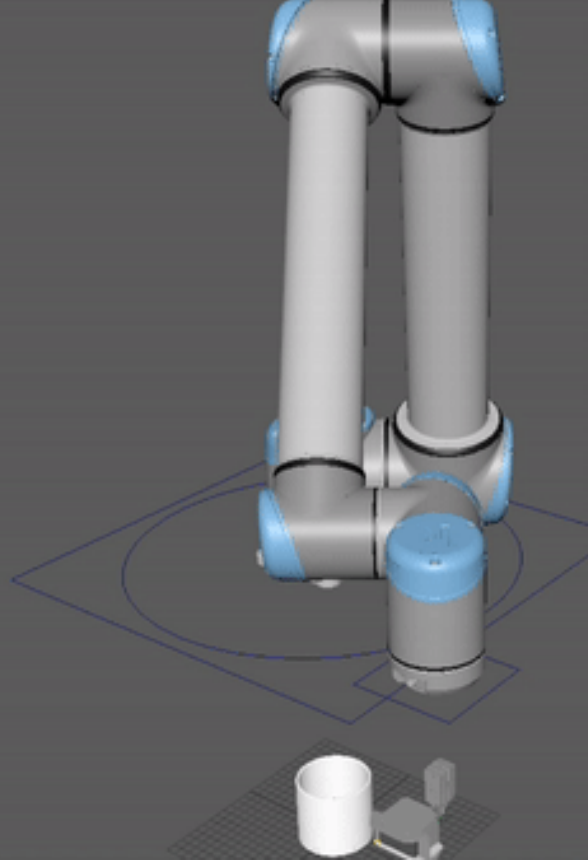
Maya-Mimic Simulation of Assembly Motion Plan



Inputs

- CAD Assembly
- Assembly Plan
- Work Cell Info
- Robot Inverse Kinematics

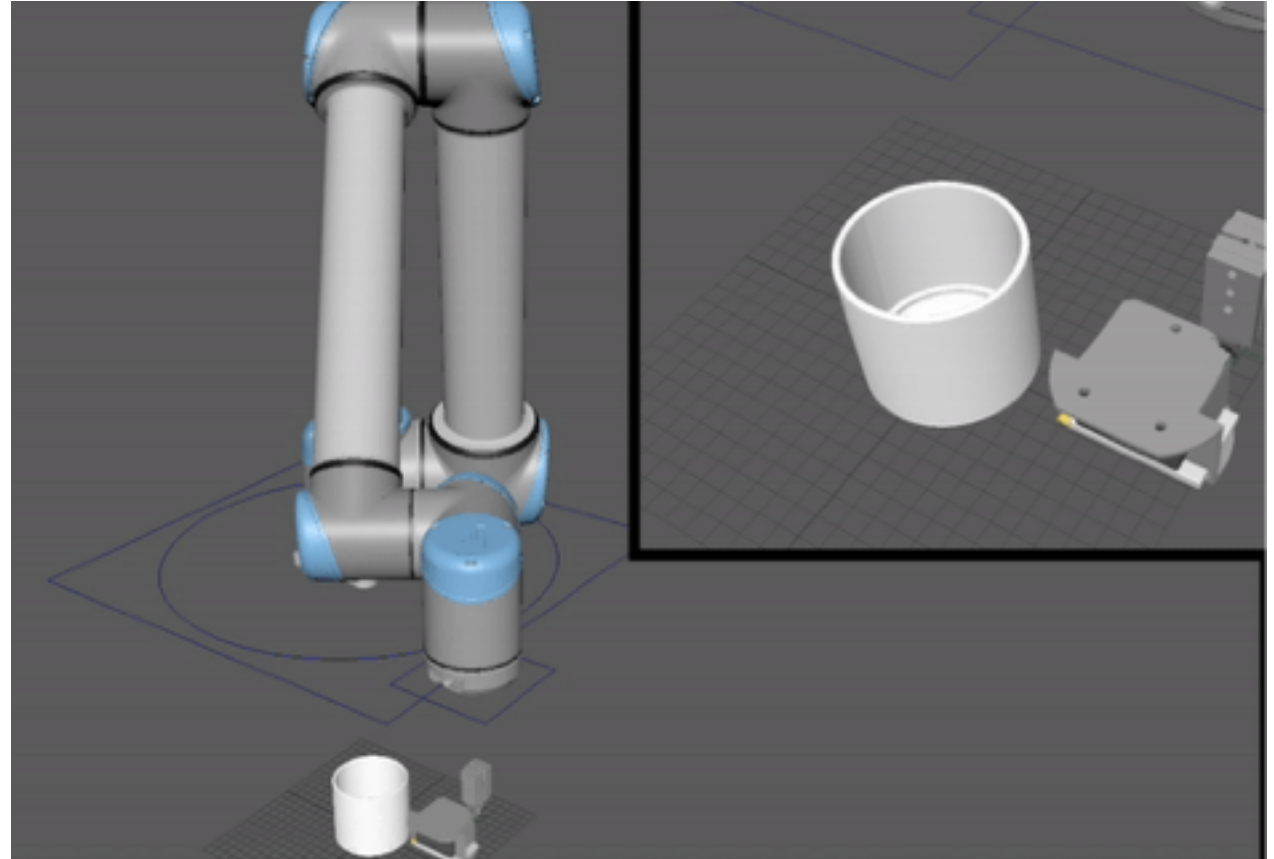
Robotic Assembly



Robotic Assembly

Inputs

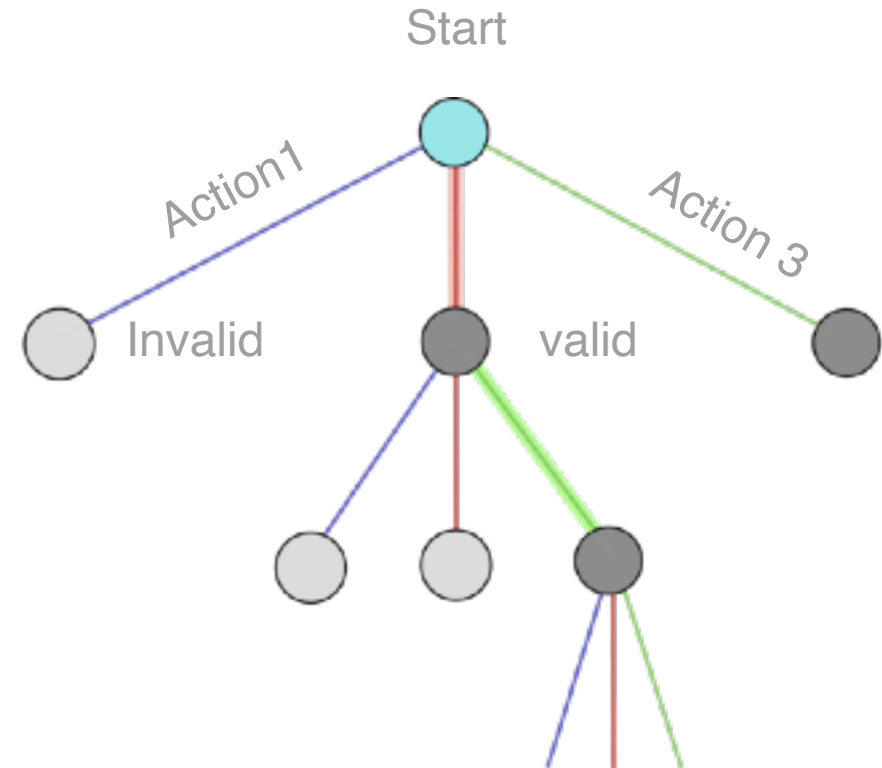
- CAD Assembly
- Assembly Plan
- Work Cell Info
- Robot Inverse Kinematics



Maya-Mimic Simulation of Assembly Motion Plan

Discrete Motion Planner

- Developed a randomized A-Star Motion Planner
- Implemented in Fusion 360 and Bullet C++ Based Environment
- Integrated A Collision Checking Library with Project ARAAS



Goal