

Brief Description

Path Planner Used :

The demo uses the CHOMP (Covariant Hamiltonian Optimization for Motion Planning) planner provided by MoveIt 2. CHOMP is a trajectory optimization based planner that efficiently computes smooth, collision free paths for robotic arms.

Obstacle Avoidance Mechanism :

Obstacle avoidance is achieved by adding static collision objects (cubes) to the planning scene using MoveIt 2's `PlanningSceneInterface`. The planner automatically computes a path that avoids these obstacles, ensuring the robot does not collide with them during motion.