Introduction to Robotics

Manipulation and Programming

Unit 2: Kinematics

PYTHON LAB PROJECT: CYLINDRICAL ARM AND SPHERICAL WRIST

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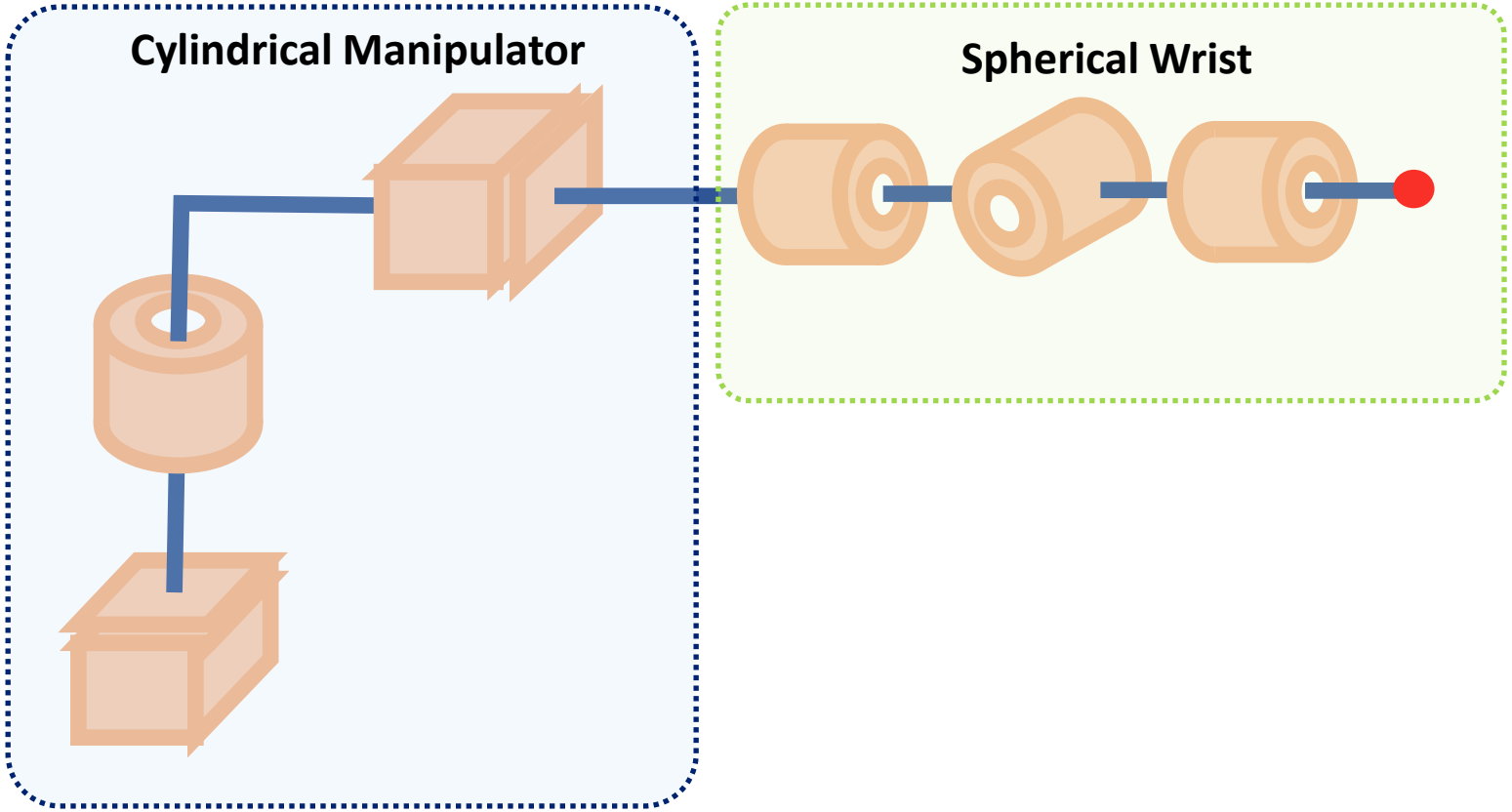
Cylindrical Arm and spherical Wrist



Problem:

1) This is a re-write assignment, we have discussed this robot with cylindrical arm and spherical wrist. Please following the 7 steps to generate the following thing:
   - Kinematic Diagram for both arm and wrist.
   - The Denavit-Hartenberg table for both arm and wrist
   - Create the DH-HTM matrix and the corresponding Rotational matrix R_3^0 and R_6^0
   - Following the 7 steps to calculate the inverse Jacobian matrix and the corresponding path planning equations.

   write them down on paper and submit it by image file or word .docx, or .pdf files.

2) Write the Python Program for the calculation of Inverse Jacobian Matrix

   submit .py or .zip file