

MMC HW4

Hw3 Using MatLab,

1. Program Forward Kinematics for Puma 560 robot
with your assumed values for a_2, a_3, d_3, d_4
and ${}^6_T T \Rightarrow {}^6_T P = [112]^T$
then, when $\bar{\theta} = [30\text{deg} \ 90 \ 90 \ 30 \ 30 \ 30]$, Find ${}^0_T T$
2. Program Inverse Kinematics for Puma 560 robot.
Find the 8 solution sets corresponding to the ${}^0_T T$ of prob. 1.
and make sure that one among your solution sets must be
[30deg 90 90 30 30 30].

continued from HW3

At that instance, all joint velocities are 0.1 *rad* / sec with the robot configuration of prob. 1

If possible, Write the Matlab Program to do next problems as

3. Find the linear and angular velocities of the tool.
4. Find the Jacobian at that instant.
5. With the inverse of Jacobian and the obtained results, do velocity inverse kinematics to find the joint velocities.