Due: 18 Oct, 2016

Dropbox #10 in JHE 307

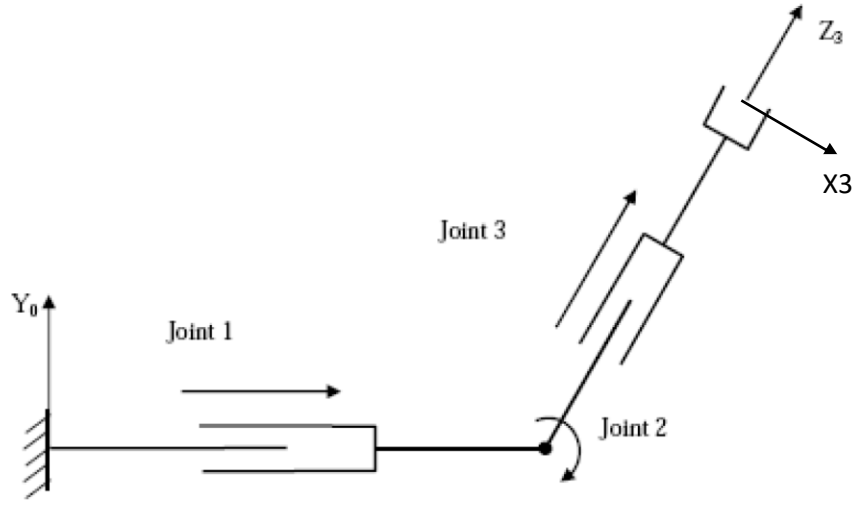
1. For the PRP planar robot shown in Figure below.

a) Using the predefined Y0 and Z3 axes, assign the frames using the D-H method.

b) Determine the D-H parameters and put them in the standard table form. Identify the joint variables.

c) Draw a diagram of the robot that properly shows the D-H frames, the joint variables, and any d or a parameters that are non-zero. Your drawing should be clear and at least 75 mm X 75 mm in size.

d) Calculate the A matrices and ${}^0T_3$.



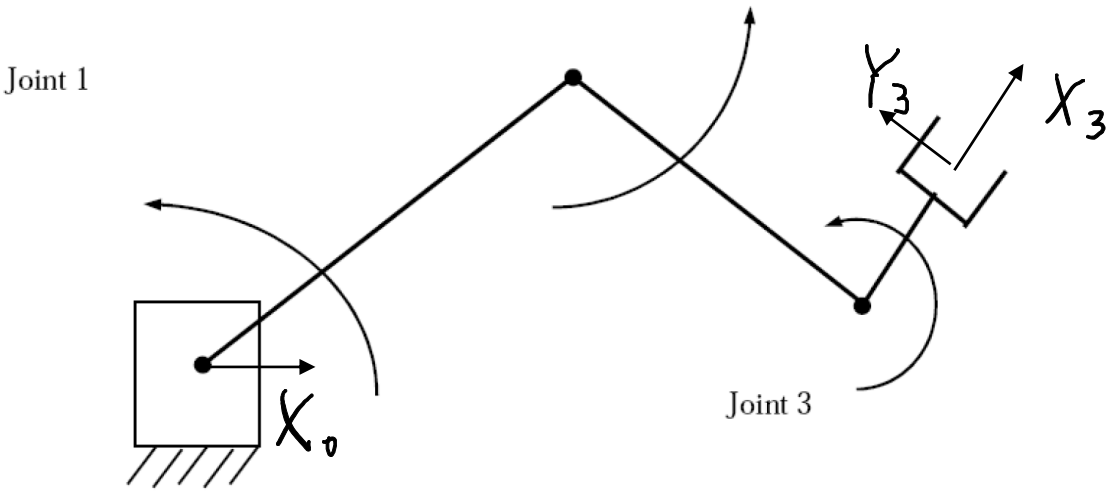
2. For the RRR robot shown in Figure below:

a) Assign the frames using the D-H method.

b) Determine the D-H parameters and put them in the standard table form. Identify the joint variables.

c) Draw a diagram of the robot that properly shows the D-H frames, the joint variables, and any *d* or *a* parameters that are non-zero. Your drawing should be clear and at least 75 mm X 75 mm in size.

d) Calculate the A matrices and ${}^0T_3$.



3. The origins of the frames shown in Figure below lie in the plane of the page. For these frames, determine the D-H parameters and put them in the standard table form.