HW 3

1) A drawing of the Puma 700 industrial robot can be obtained here. Make a kinematic diagram of this robot. Label **S** and **a** vectors (joint and link vectors). Make a table listing all the constant mechanism parameters and their numerical values for this robot.

2) Problem 4.1. Write a forward analysis computer function for one of the following robots:

PUMA: If the last digit of your UF ID is 0, 1, 2, or 3.

G.E. P60: If the last digit of your UF ID is 4, 5, or 6.

Cincinnati Milacron T3-776: If the last digit of your UF ID is 7, 8, or 9.

Note:

The constant mechanism parameters for the PUMA robot are listed in Table 3.2 and correspond to the kinematic model shown in Figure 3.30. Use a value of S6 = 4 in.

The constant mechanism parameters for the G.E. P60 robot are listed in Table 11.4 and correspond to the kinematic model shown in Figure 11.11. Use a value of S6 = 15.24 cm.

The constant mechanism parameters for the T3-776 robot are listed in Table 11.7 and correspond to the kinematic model shown in Figure 11.20. Use a value of S6 = 6 in.