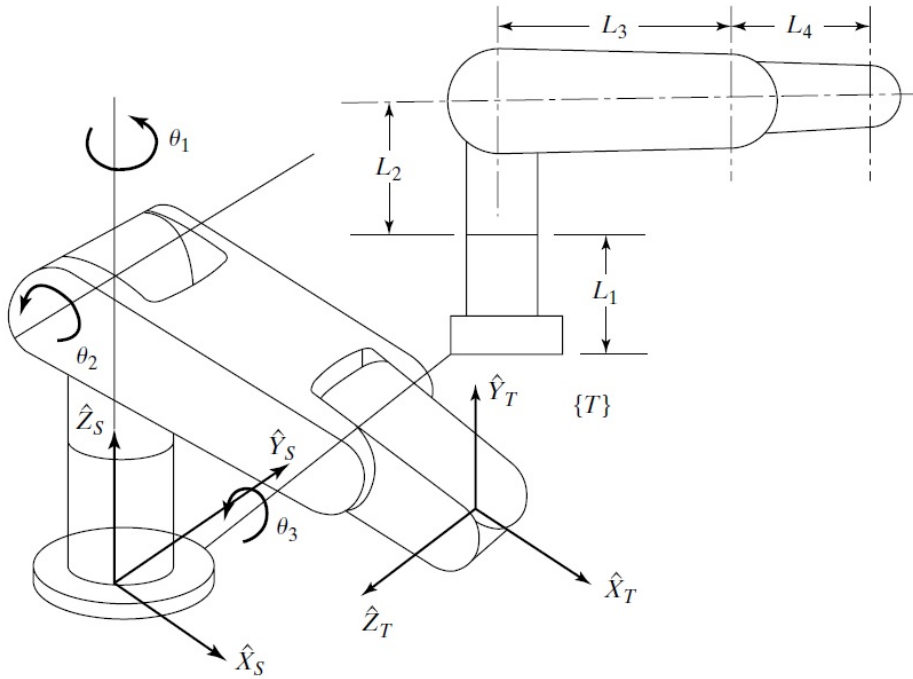


Assignment: EE 304 Robotics

Velocity Analysis



For the robot shown above, assign i frame and \bar{i} frame to each of the links. Write D-H link parameters for each of the links. Also write D-H joint parameters for each of the joints. Perform iterative velocity analysis and write expression for ${}^0\omega_0$, ${}^1\omega_1$, ${}^2\omega_2$, ${}^3\omega_3$, ${}^T\omega_T$, 0v_0 , 1v_1 , 2v_2 , 3v_3 , and Tv_T . You may perform the calculations by hand or by using program. However for submission you write answers on paper, scan it submit the scan. If you performed calculations using program, you may additionally submit the program. [6 marks]