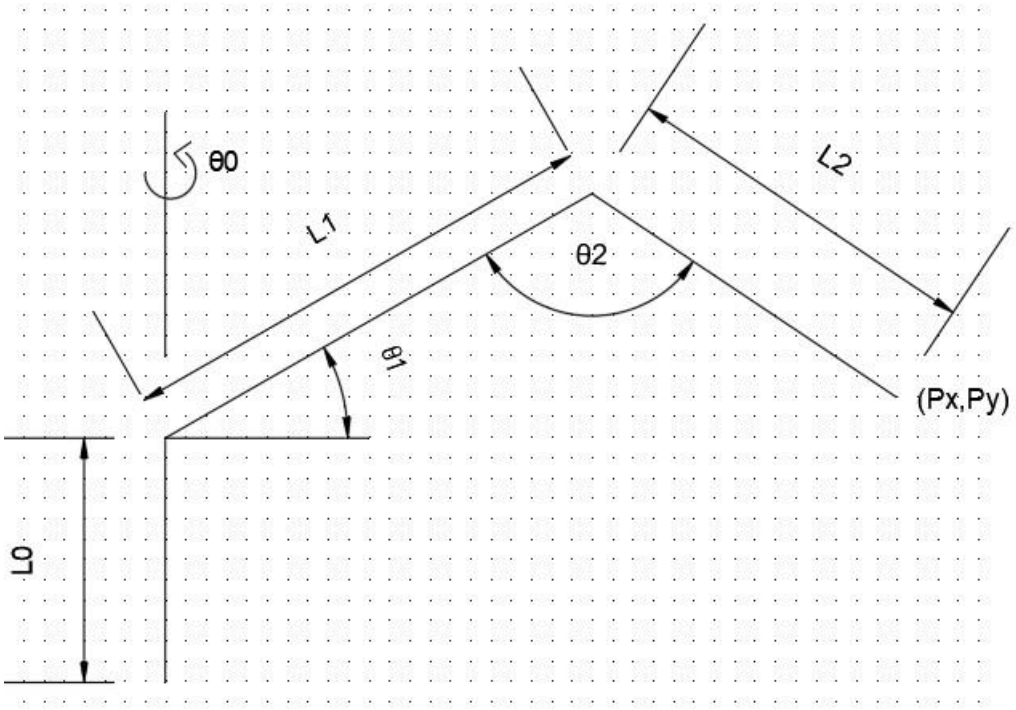
Mechanical Arm Forward Kinematic



Position of End Effector= $L_0+L_1+L_2$

$P_x = L_1\cos[\theta_1] + L_2\cos[\pi - (\theta_1+\theta_2)]$

$P_x = L_1\cos[\theta_1] - L_2\cos[\theta_1+\theta_2]$

$P_y = L_0 + L_1\sin[\theta_1] - L_2\sin[\pi-(\theta_1+\theta_2)]$

$P_y = L_0 + L_1\sin[\theta_1] - L_2\sin[\theta_1+\theta_2]$

$L_0 = 280$ mm $\quad -90° < \theta_0 < 90°$

$L_1 = 460$ mm $\quad 1.6° < \theta_1 < 38.4°$

$L_2 = 337.515$ mm $\quad 5.2° < \theta_2 < 165.2°$