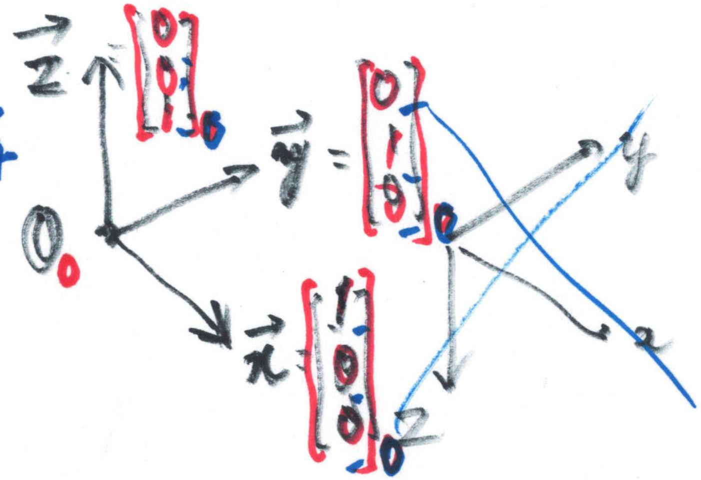
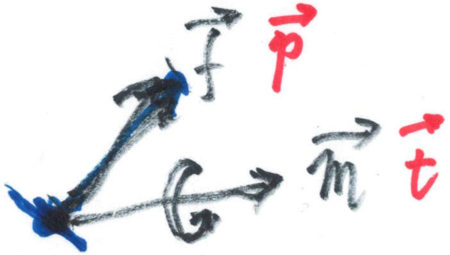
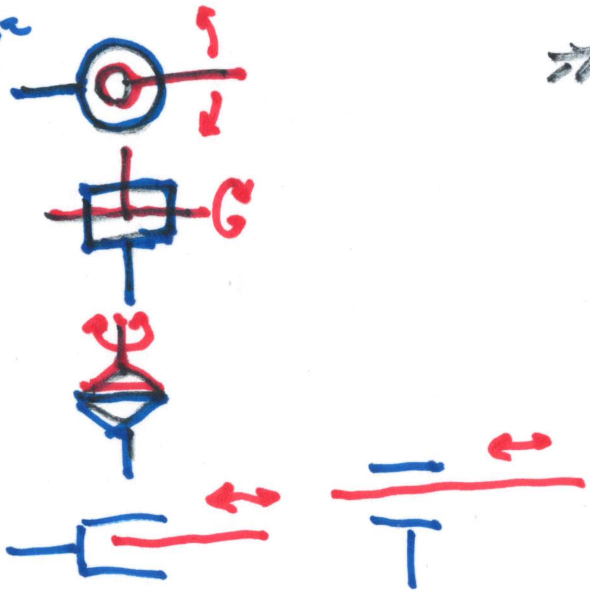
2025.11.12
Rbt (10)-1/4





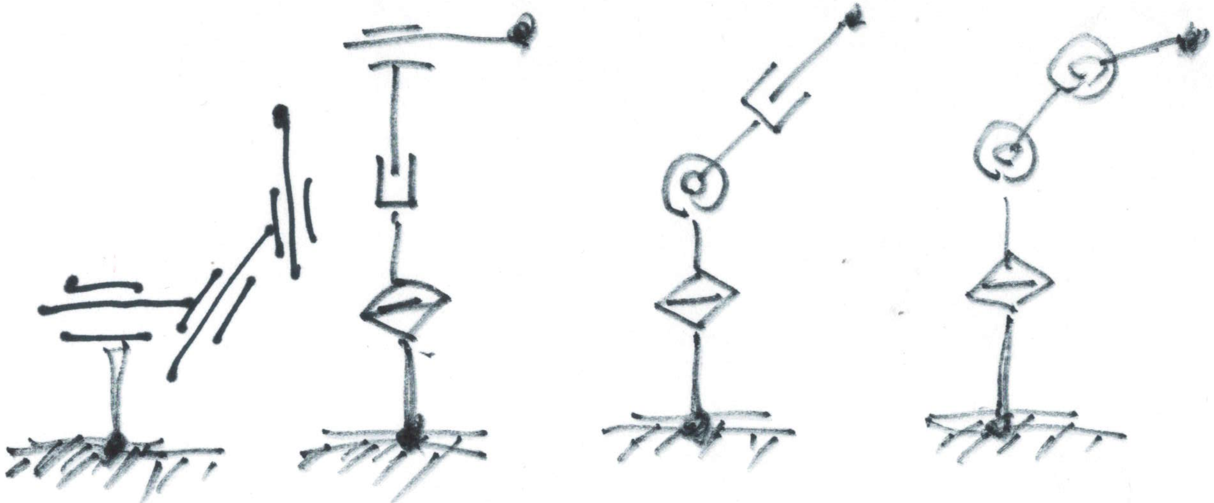
joint



base
ground

4-fundamen-
industrial robot

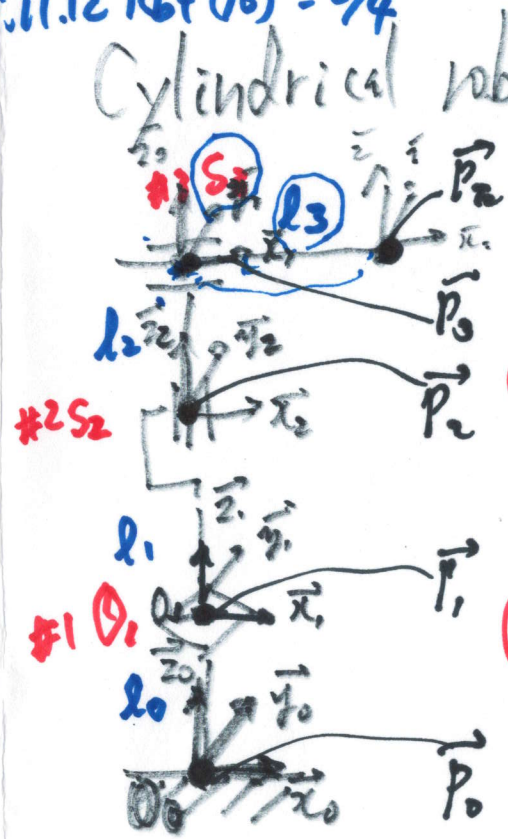
Cart Cylind Spherical Articulated

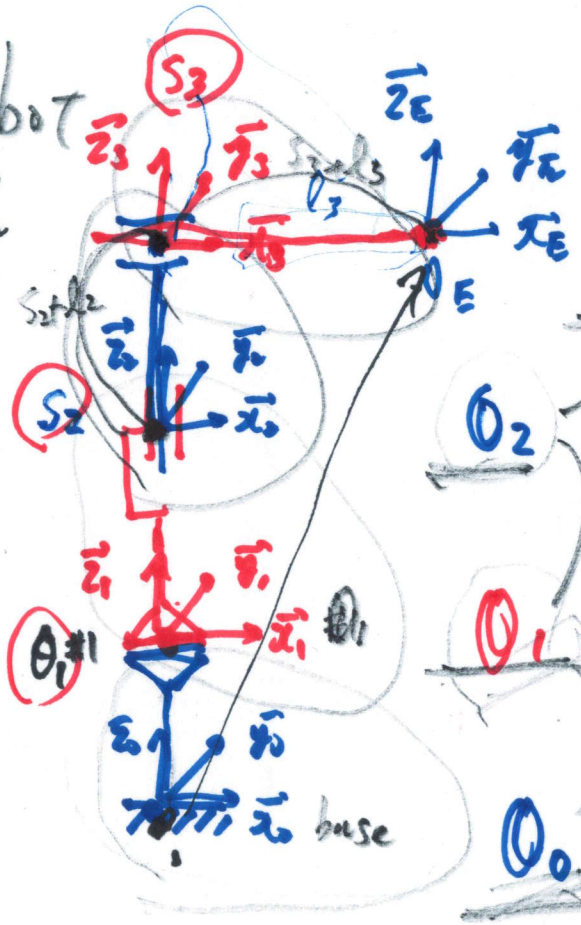


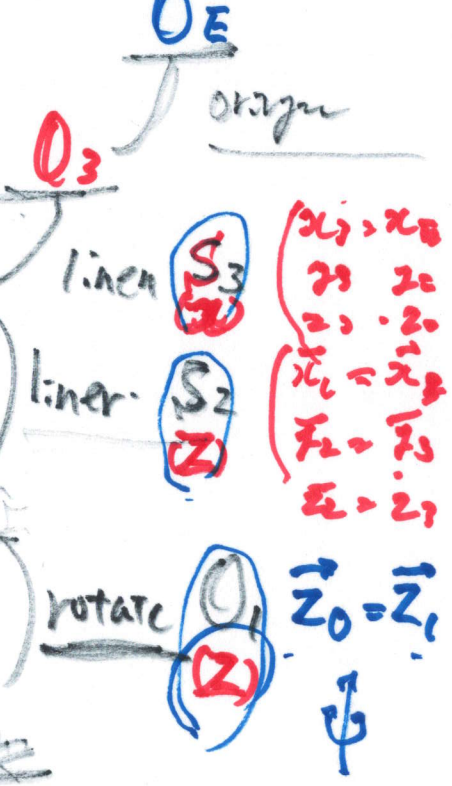
- initial posture
- local coordinate
- (understanding / definition) of robot structure configuration
- end tip position

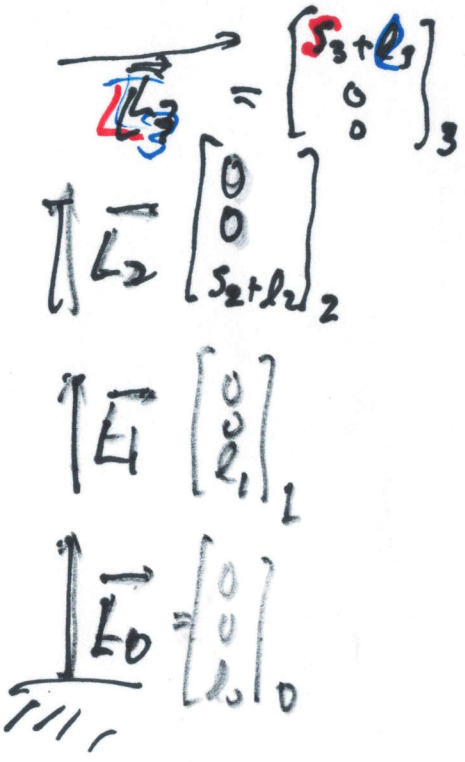
2025.11.12 Rbt (10) - 2/4

Cylindrical robot









a Initial posture

all var = zero

9:45 → 9:50

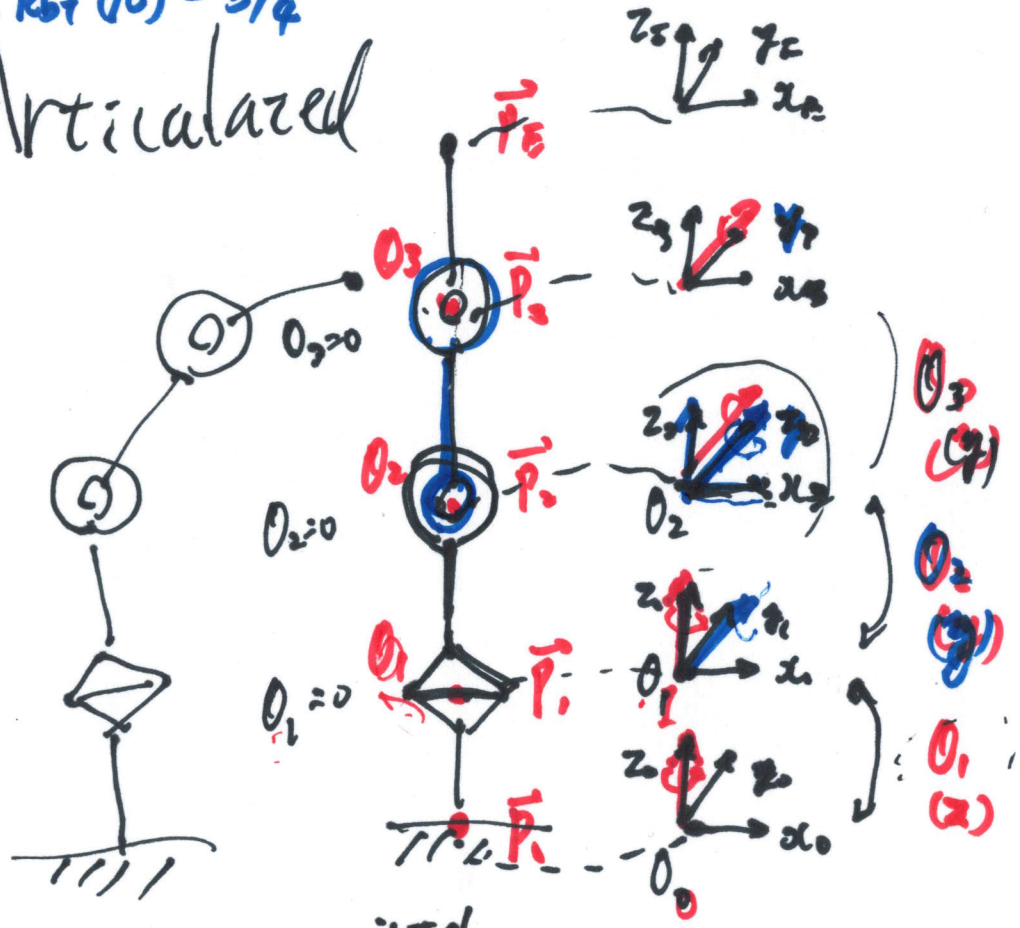
$$\vec{P}_E = \vec{L}_0 + \vec{L}_1 + \vec{L}_2 + \vec{L}_3$$

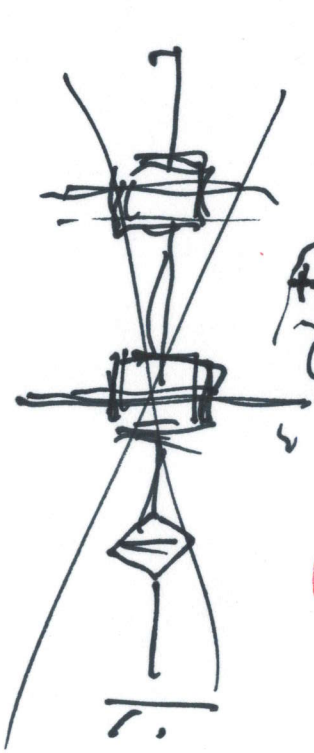
$$= \begin{bmatrix} 0 \\ 0 \\ l_3 \end{bmatrix}_0 + \begin{bmatrix} 0 \\ 0 \\ l_1 \end{bmatrix}_1 + \begin{bmatrix} 0 \\ 0 \\ s_2+l_2 \end{bmatrix}_2 + \begin{bmatrix} s_3+l_3 \\ 0 \\ 0 \end{bmatrix}_3$$

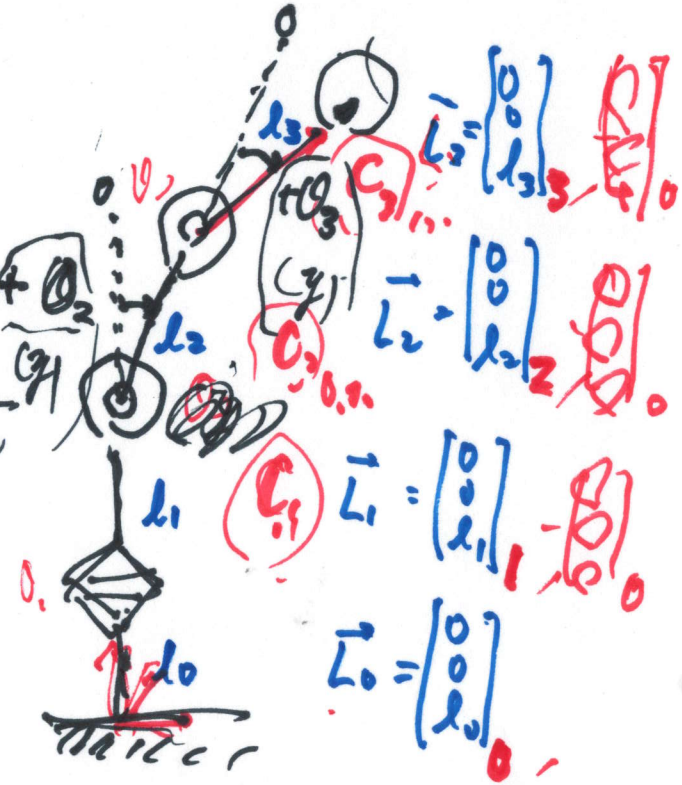
$$= \begin{bmatrix} \quad \end{bmatrix}_0 + \begin{bmatrix} \quad \end{bmatrix}_0 + \begin{bmatrix} \quad \end{bmatrix}_0 + \begin{bmatrix} \quad \end{bmatrix}_0 = \begin{bmatrix} \quad \end{bmatrix}_0$$

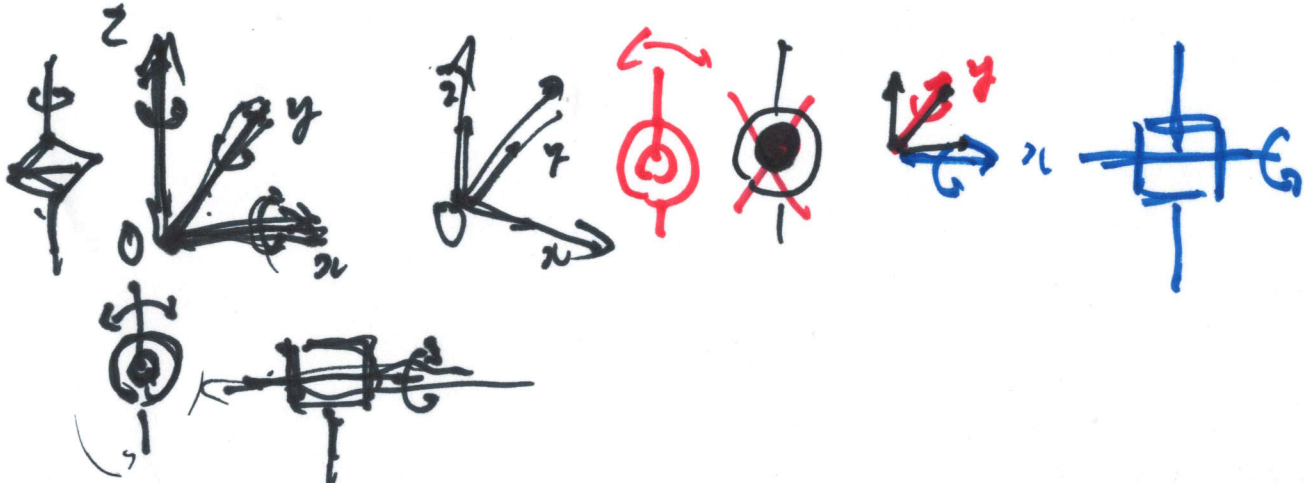
2025.11.12 Rbt (10) - 3/4

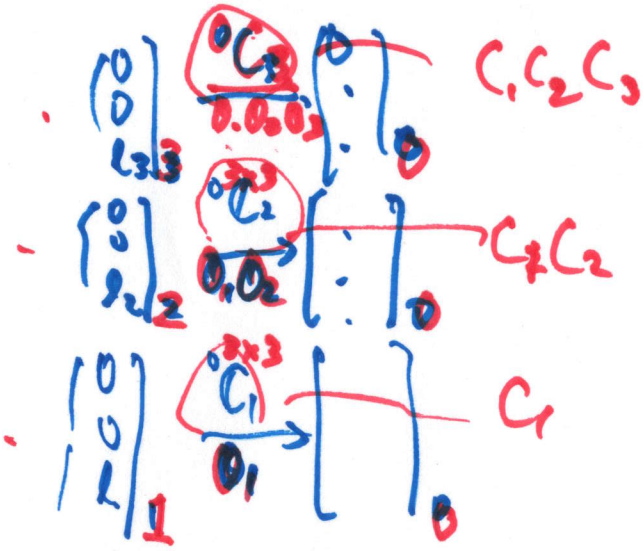
Articulated











2025.11.12 Rbt (10) - 4/4