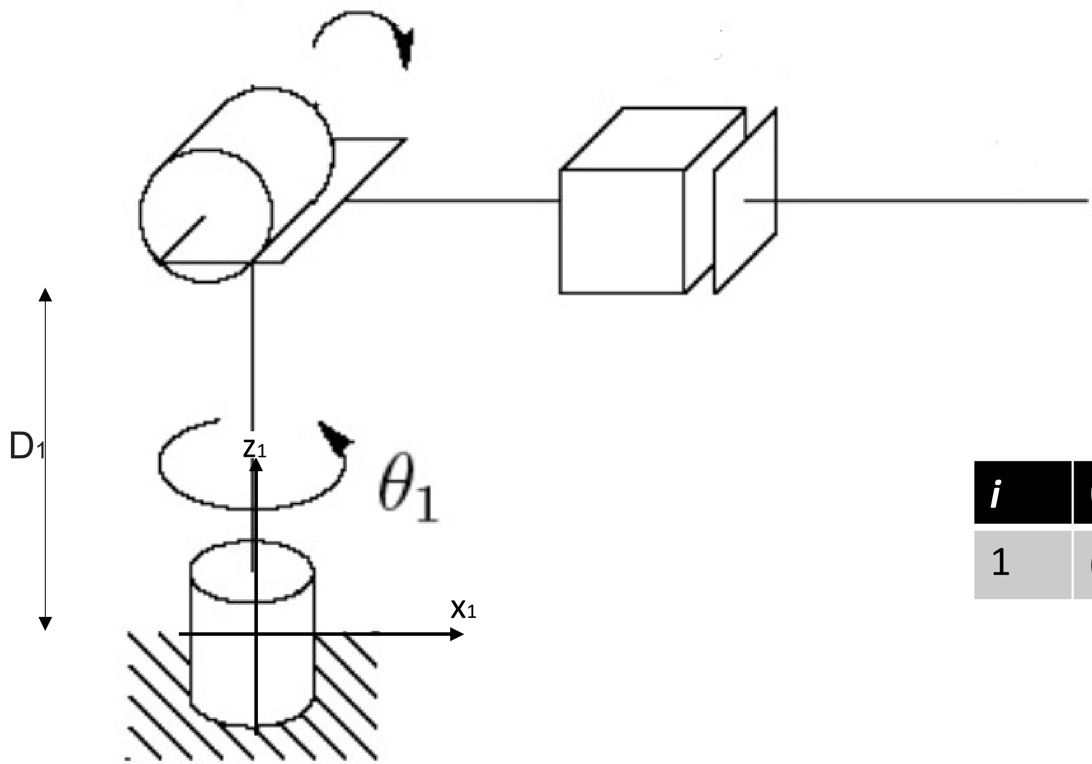
Tabela Denavit-Hartenberg



i	θ	d	a	α
1	θ_1*	D_1	0	-90°

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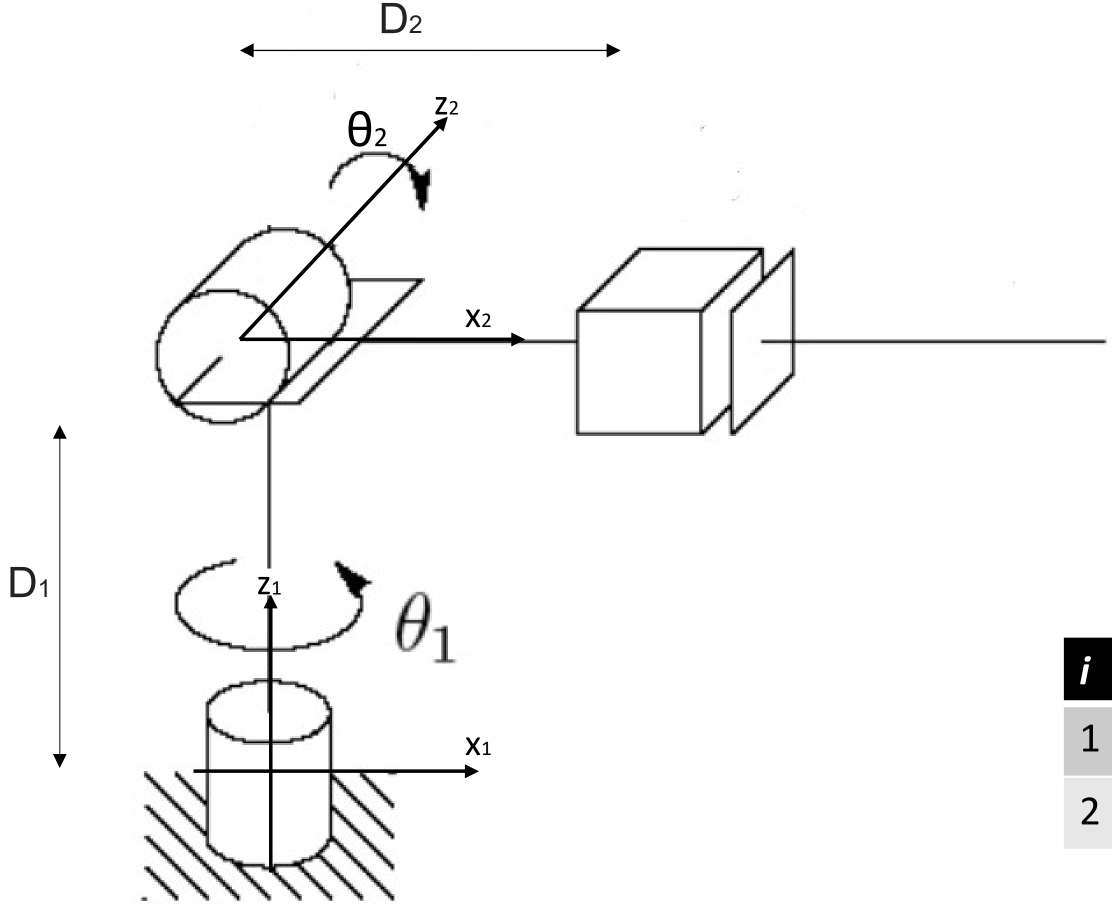
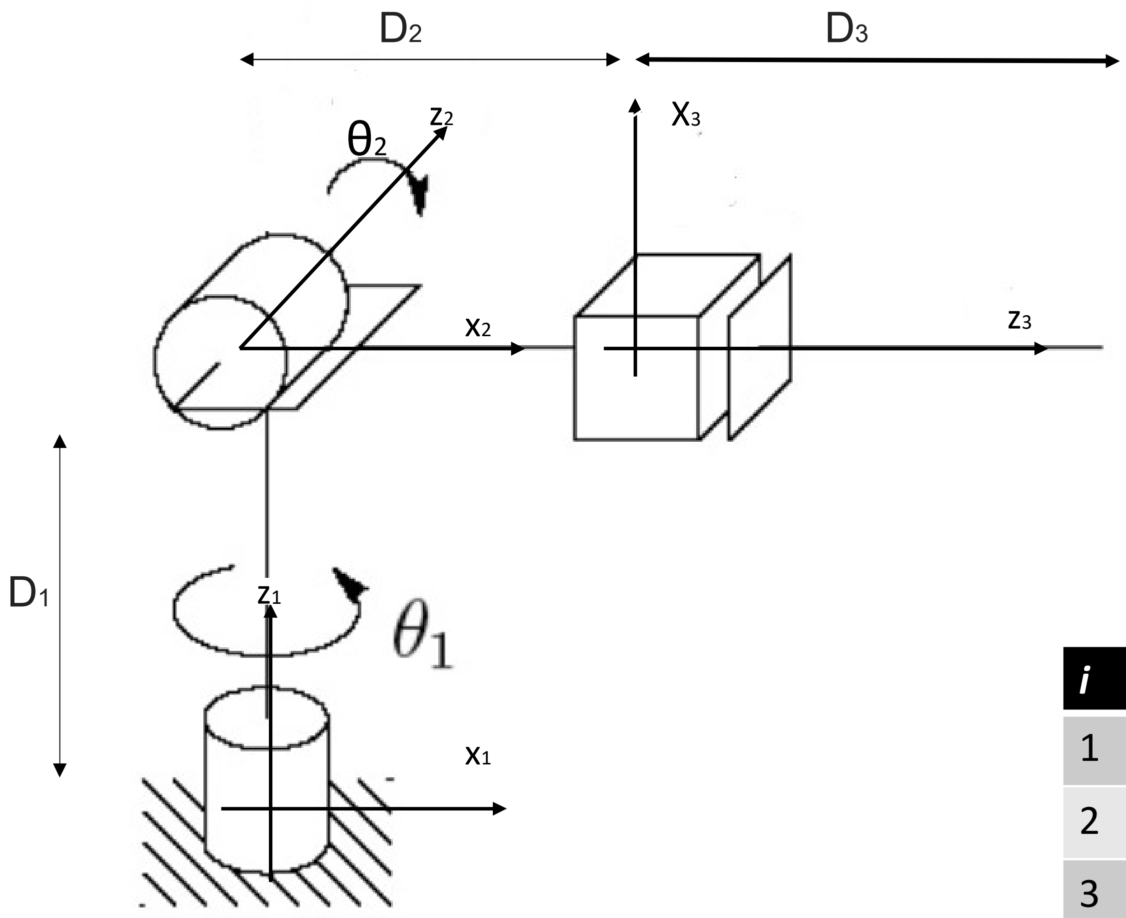


i	θ	d	a	α
1	θ_1*	D_1	0	-90°
2	Θ_2*	0	D_2	-90°

Tabela Denavit-Hartenberg



i	θ	d	a	α
1	θ_1*	D_1	0	-90°
2	Θ_2*	0	D_2	-90°
3	0	D_3*	0	0

Matriz Homogênea

$^{1}\mathbf{A}_0 = \mathrm{Rot}(z,\theta_1)\mathrm{Trans}(z,D_1)\mathrm{Trans}(x,0)\mathrm{Rot}(x,-90°)$

$$^{1}\mathbf{A}_0 = \begin{pmatrix} C\theta_1 & -S\theta_1 & 0 & 0 \\ S\theta_1 & C\theta_1 & 0 & 0 \\ 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{pmatrix} \begin{pmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & D_1 \\ 0 & 0 & 0 & 1 \end{pmatrix} \begin{pmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{pmatrix} \begin{pmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & -1 & 0 \\ 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{pmatrix} =$$

$$^{1}\mathbf{A}_0 = \begin{pmatrix} C\theta_1 & 0 & -S\theta_1 & 0 \\ S\theta_1 & 0 & C\theta_1 & 0 \\ 0 & 1 & 0 & D_1 \\ 0 & 0 & 0 & 1 \end{pmatrix}$$

Matriz Homogênea

$^2A_1 = Rot(z,\theta_2)Trans(z,0)Trans(x, D_2)Rot(x, -90°)$

$$^2A_1 = \begin{pmatrix} C\theta_2 & -S\theta_2 & 0 & 0 \\ S\theta_2 & C\theta_2 & 0 & 0 \\ 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{pmatrix} \begin{pmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{pmatrix} \begin{pmatrix} 1 & 0 & 0 & D_2 \\ 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{pmatrix} \begin{pmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & -1 & 0 \\ 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{pmatrix} =$$

$$^2A_1 = \begin{pmatrix} C\theta_2 & 0 & -S\theta_1 & D_2C\theta_2 \\ S\theta_2 & 0 & C\theta_1 & D_2S\theta_2 \\ 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{pmatrix}$$

Matriz Homogênea

$^{3}A_{2}$ = Rot(z,0)Trans(z, D_3)Trans(x, 0)Rot(x, 0)

$$^{3}A_{2} = \begin{pmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{pmatrix} \begin{pmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & D_3 \\ 0 & 0 & 0 & 1 \end{pmatrix} \begin{pmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{pmatrix} \begin{pmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{pmatrix} =$$

$$^{3}A_{2} = \begin{pmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & D_3 \\ 0 & 0 & 0 & 1 \end{pmatrix}$$