Projekt MORO

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1 Parametry DH

L. p.	a_{i-1}	α_{i-1}	d_i	θ_i
1	0	0	0	θ_1
2	a_1	$-\pi/2$	0	θ_2
3	a_2	0	0	θ_3
4	a_3	$\pi/2$	a_4	θ_4
5	0	$\pi/2$	0	θ_5
6	0	$\pi/2$	0	θ_6

Tabela 1: Parametry DH

2 Kinematyka prosta

$$T_1^0 = \begin{pmatrix} \cos(\theta_1) & -\sin(\theta_1) & 0 & 0 \\ \sin(\theta_1) & \cos(\theta_1) & 0 & 0 \\ 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{pmatrix}$$

$$T_2^1 = \begin{pmatrix} \cos(\theta_2) & 0 & -\sin(\theta_2) & \mathrm{a}_1\cos(\theta_2) \\ \sin(\theta_2) & 0 & \cos(\theta_2) & \mathrm{a}_1\sin(\theta_2) \\ 0 & -1 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{pmatrix}$$

$$T_3^2 = \begin{pmatrix} \cos(\theta_3) & -\sin(\theta_3) & 0 & \mathrm{a}_2\cos(\theta_3) \\ \sin(\theta_3) & \cos(\theta_3) & 0 & \mathrm{a}_2\sin(\theta_3) \\ 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{pmatrix}$$

$$T_4^3 = \begin{pmatrix} \cos(\theta_4) & 0 & \sin(\theta_4) & \mathrm{a}_3\cos(\theta_4) \\ \sin(\theta_4) & 0 & -\cos(\theta_4) & \mathrm{a}_3\sin(\theta_4) \\ 0 & 1 & 0 & \mathrm{a}_4 \\ 0 & 0 & 0 & 1 \end{pmatrix}$$

$$T_5^4 = \begin{pmatrix} \cos(\theta_5) & 0 & \sin(\theta_5) & 0 \\ \sin(\theta_5) & 0 & -\cos(\theta_5) & 0 \\ 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{pmatrix}$$

$$T_6^5 = \begin{pmatrix} \cos(\theta_6) & 0 & \sin(\theta_6) & 0 \\ \sin(\theta_6) & 0 & -\cos(\theta_6) & 0 \\ 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{pmatrix}$$

3 Kinematyka odwrotna