

Correction explained

Assignment correction

The forward kinematics in eq. 2 were incorrect. The mistake and correct version are listed below.



$${}^0p_6 = \begin{bmatrix} P_{E,x} \\ P_{E,y} \\ P_{E,z} \end{bmatrix} = \begin{bmatrix} -9s_1c_4s_5 - 9c_1c_{2+3}s_4s_5 - 9c_1s_{2+3}c_5 - c_1(4c_{2+3} + 11s_{2+3} + 17s_2) \\ +9c_1c_4s_5 - 9s_1c_{2+3}s_4s_5 - 9s_1s_{2+3}c_5 - s_1(4c_{2+3} + 11s_{2+3} + 17s_2) \\ -9s_{2+3}s_4s_5 - 9c_{2+3}c_5 + 17c_2 + 11c_{2+3} - 4s_{2+3} + 17 \end{bmatrix}$$



$${}^0p_6 = \begin{bmatrix} P_{E,x} \\ P_{E,y} \\ P_{E,z} \end{bmatrix} = \begin{bmatrix} 9s_1c_4s_5 + 9c_1c_{2+3}s_4s_5 - 9c_1s_{2+3}c_5 - c_1(4c_{2+3} + 11s_{2+3} + 17s_2) \\ -9c_1c_4s_5 + 9s_1c_{2+3}s_4s_5 - 9s_1s_{2+3}c_5 - s_1(4c_{2+3} + 11s_{2+3} + 17s_2) \\ -9s_{2+3}s_4s_5 - 9c_{2+3}c_5 + 17c_2 + 11c_{2+3} - 4s_{2+3} + 17 \end{bmatrix}$$

Script correction

Old script

```
T5 = DHmatrix(pi/2,0,q(5),0);  
T6 = DHmatrix(-pi/2,0,pi/2,16)
```

New script

```
T5 = DHmatrix(-pi/2,0,q(5),0);  
T6 = DHmatrix(pi/2,0,pi/2,16)
```