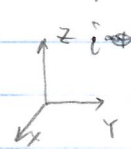


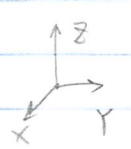
$${}^{i-1}\bar{I}_i = {}^iR_{i-1}^T \cdot \bar{I}_i \cdot {}^iR_{i-1}$$

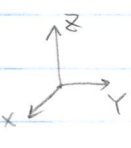
$$= {}^{i-1}R_i \cdot I_i \cdot {}^{i-1}R_i^T$$

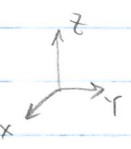
$$R^{-1} = R^T$$

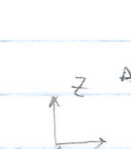
Waist Identity.

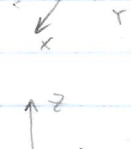
R\_HIP\_Y   ${}^{i-1}R_i = \begin{bmatrix} 0 & 1 & 0 \\ -1 & 0 & 0 \\ 0 & 0 & 1 \end{bmatrix}$

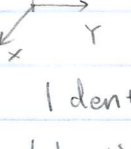
R\_HIP\_R   $R = \begin{bmatrix} 0 & 1 & 0 \\ 0 & 0 & 1 \\ 1 & 0 & 0 \end{bmatrix}$

R\_HIP\_P   $R = \begin{bmatrix} 0 & 0 & 1 \\ 1 & 0 & 0 \\ 0 & 1 & 0 \end{bmatrix}$

R\_KNEE\_P  Same

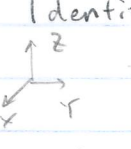
R\_ANKLE\_P  Same

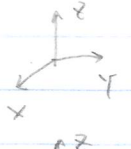
R\_ANKLE\_R (r. ankle)   $R = \begin{bmatrix} 0 & 0 & 1 \\ 0 & -1 & 0 \\ 1 & 0 & 0 \end{bmatrix}$

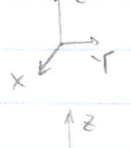
CHEST-P   $R = \begin{bmatrix} 1 & 0 & 0 \\ 0 & 0 & -1 \\ 0 & 1 & 0 \end{bmatrix}$

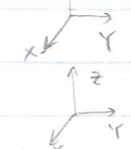
CHEST\_Y Identity.

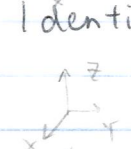
NECK\_Y Identity.

NECK-P  Same


R\_SHOULDER-P  Same

R\_SHOULDER-R   $R = \begin{bmatrix} 0 & 0 & -1 \\ 0 & 1 & 0 \\ 1 & 0 & 0 \end{bmatrix}$

R\_SHOULDER\_Y   $R = \begin{bmatrix} 0 & -1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{bmatrix}$

R\_ELBOW\_P   $R = \begin{bmatrix} \text{Same} \end{bmatrix}$

R\_WRIST\_Y Identity

R\_WRIST\_P   $R = \begin{bmatrix} \text{Same} \end{bmatrix}$

R\_WRIST\_R   $R = \begin{bmatrix} 0 & 0 & -1 \\ 0 & 1 & 0 \\ 1 & 0 & 0 \end{bmatrix}$  Same

