3D-3D Pose

1 question

1 point

1.

Find the rotation matrix R such that $\|A - RB\|_F^2$ is minimized, where

$$A = \begin{bmatrix} 1 & 1 & -1 & -1 \\ 1 & -1 & -1 & 1 \\ 1 & 1 & 1 & 1 \end{bmatrix}, \qquad B = \begin{bmatrix} -1.2131 & -1.4413 & 0.3470 & 0.5752 \\ 0.0851 & -0.7858 & -1.6594 & -0.7885 \\ -1.2334 & 0.5525 & 0.3550 & -1.4309 \end{bmatrix}$$

- $R = \begin{bmatrix} -0.8941 & 0.4368 & 0.0988 \\ 0.1141 & 0.4355 & -0.8930 \\ -0.4330 & -0.7871 & -0.4392 \end{bmatrix}$
- $R = \begin{bmatrix} 0.0623 & 0.3400 & 0.9384 \\ -0.0121 & -0.9399 & 0.3413 \\ 0.9980 & -0.0327 & -0.0545 \end{bmatrix}$
- $R = \begin{bmatrix} 0.6580 & -0.7370 & 0.1545 \\ -0.7189 & -0.6759 & -0.1625 \\ 0.2242 & -0.0042 & -0.9745 \end{bmatrix}$

1 question unanswered

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