

Rotation plane

Rotation axis



$$R = \overbrace{\begin{bmatrix} | & | \\ v_1 & v_2 \\ | & | \end{bmatrix}}^{\text{Rotation plane}} \begin{bmatrix} | \\ v_3 \\ | \end{bmatrix} \begin{bmatrix} \cos \theta & -\sin \theta & 0 \\ \sin \theta & \cos \theta & 0 \\ 0 & 0 & 1 \end{bmatrix} \begin{bmatrix} - & v_1^T & - \\ - & v_2^T & - \\ - & v_3^T & - \end{bmatrix}$$

orthonormal:

V

$$V^T V = V V^T = I$$

V^T