

$$A = \begin{bmatrix} 1 & 2 \\ 3 & 4 \end{bmatrix} = U S V^T$$

where  $U = \begin{bmatrix} -0.41 & -0.91 \\ -0.91 & 0.41 \end{bmatrix}$   $S = \begin{bmatrix} 5.47 & 0 \\ 0 & 0.37 \end{bmatrix}$

$$V^T = \begin{bmatrix} -0.58 & -0.82 \\ 0.82 & -0.58 \end{bmatrix}$$