

$$P = \begin{bmatrix} 0 \\ 1 \end{bmatrix} - \text{sākumpunkts}$$

$$T = \begin{bmatrix} T_x \\ T_y \end{bmatrix} - \text{mērķis}$$

$$R(\Theta) = \begin{bmatrix} \cos\Theta & -\sin\Theta \\ \sin\Theta & \cos\Theta \end{bmatrix}$$

$$R'(\Theta) = \begin{bmatrix} -\sin\Theta & -\cos\Theta \\ \cos\Theta & -\sin\Theta \end{bmatrix}$$

$$d(\Theta_1, \Theta_2) = R(\Theta_1)P + R(\Theta_1)(R(\Theta_2)P) - T$$

$$\frac{\partial d(\Theta_1, \Theta_2)}{\partial \Theta_1} = R'(\Theta_1)P + R'(\Theta_1)(R(\Theta_2)P)$$

$$f(\Theta_1, \Theta_2) = \frac{d(\Theta_1, \Theta_2)^2}{2}$$

$$\frac{\partial f(\Theta_1, \Theta_2)}{\partial \Theta_1} = \frac{\partial(\frac{1}{2}d(\Theta_1, \Theta_2)^2)}{\partial \Theta_1} =$$

$$\frac{\partial(\frac{1}{2}d(\Theta_1, \Theta_2)^2)}{\partial d(\Theta_1, \Theta_2)} \cdot \frac{\partial d(\Theta_1, \Theta_2)}{\partial \Theta_1} =$$

$$d(\Theta_1, \Theta_2) \cdot (R'(\Theta_1)P + R'(\Theta_1)(R(\Theta_2)P))$$