Equations

$$(x, y) \ = \ (\frac{X_0}{Z_0}\ f, \frac{Y_0}{Z_0}\ f).$$

$$\left[\begin{array}{cc} \sum(\frac{\partial I}{\partial x})^2 & \sum(\frac{\partial I}{\partial x})(\frac{\partial I}{\partial y}) \\ \sum(\frac{\partial I}{\partial x})(\frac{\partial I}{\partial y}) & \sum(\frac{\partial I}{\partial y})^2 \end{array}\right] \left[\begin{array}{c} h_x \\ h_y \end{array}\right] = -\left[\begin{array}{c} \sum(I(x,y) - J(x,y))\frac{\partial I}{\partial x} \\ \sum(I(x,y) - J(x,y))\frac{\partial I}{\partial y} \end{array}\right]$$

$$\mathbf{n} \equiv \frac{1}{\sqrt{(\frac{\partial Z}{\partial X})^2 + (\frac{\partial Z}{\partial Y})^2 + 1}}(\frac{\partial Z}{\partial X}, \frac{\partial Z}{\partial Y}, -1)$$

$$E(X, Y) \ \approx \ L_{src}\Omega \ \{ \ -l_Z \ \ + \ \frac{\partial Z}{\partial X} l_X + \frac{\partial Z}{\partial Y} l_Y \ \ + \frac{l_Z}{2}((\frac{\partial Z}{\partial X})^2 + (\frac{\partial Z}{\partial Y})^2) \ \}$$

$$E(X, Y) \ = \ L_{src} \int_{\mathbf{l} \in \mathcal{V}(X,Y)} \mathbf{n}(\mathbf{x}) \cdot \mathbf{l} \ d\Omega$$

$$I(X, Y) \ = \ \rho(X, Y) \ \mathbf{n}(X, Y) \cdot \mathbf{L}$$

$$(x - x_i, y - y_i) \cdot (\cos\theta, \sin\theta) = 0$$

$$\mathbf{P} = \mathbf{KR}[\ \mathbf{I} \mid \ -\mathbf{C}]$$

$$\mathbf{A}^T\mathbf{A}\mathbf{x} = \mathbf{A}^T\mathbf{b}.$$

$$\mathbf{A} = \mathbf{U \Sigma V^T}$$

$$\left[\begin{array}{c} X_{ki} - \bar{X}_k \\ Y_{ki} - \bar{Y}_k \end{array}\right]_{2\times N} = [\tilde{\mathbf{R}}_k]_{2\times 3} \left[\begin{array}{c} X_i \\ Y_i \\ Z_i \end{array}\right]_{3\times N}$$

$$\mathbf{E} \ \equiv \ \mathbf{R}_2\mathbf{R}_1^T[\mathbf{T}_1]_\times$$

$$\mathbf{X}_2^T \ \mathbf{E}\mathbf{X}_1 = 0.$$

$$d = x_{left} - x_{right}$$