

$$\begin{cases} d(u, v) = ||x_u - x_v||^2 + ||y_u - y_v||^2 \leq r \\ w(u, v) = e^{-\frac{(I_u - I_v)^2}{\sigma_I^2} - \frac{d(u, v)^2}{\sigma_d^2}} \geq s \end{cases}$$