Gaussian RBF Kernel

Sigmoid Kernel

$$K(\vec{x}, \vec{l}^i) = e^{-\frac{||\vec{x} - \vec{l}^i||}{2\sigma^2}}$$

 $K(X,Y) = \tanh(\gamma \cdot X^T Y + r)$

Polynomial Kernel
$$K(X,Y) = (\gamma \cdot X^TY + r)^d, \gamma > 0$$