

$$k(\mathbf{x}_i, \mathbf{x}_j) = \psi(\mathbf{x}_i)' \psi(\mathbf{x}_j) \approx \mathbf{z}(\mathbf{x}_i)' \mathbf{z}(\mathbf{x}_j) = \tilde{k}(\mathbf{x}_i, \mathbf{x}_j)$$