



BRITISH EMBASSY  
BELGRADE

$$q(x, y) = \frac{\| \cancel{(x-y)}^T C(x-y) \|}{1 - x^T C y + a(x^T C u(y))}$$

Then  $q$  is a kernel.

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~~is~~ a kernel then

$$k(x, y) = q(x-y, x-y)$$

$$\sum c_i k(x_i, x_j) e_j$$

$$= \sum c_i q(\cancel{x_i} \text{ } x_i - x_j, x_i - x_j) e_j$$

$$\frac{\cancel{(x-y)^T C(x-y)}}{\|$$

$$= \cancel{1} \quad x^T C x - 2x^T C y + y^T C y.$$