

The inter-point normalizer:

$$\bar{\chi}(t) = \frac{\chi(t) - \chi(t_i)}{\|\chi(t_i) - \chi(t_j)\|_2},$$

where  $0 \leq t < T$  and

$$t_i = i, t_j = j \text{ when } \max \|\chi(i) - \chi(j)\|$$

The inter-point unnormailizer:

$$\chi(t) = \bar{\chi}(t)\|\chi(t_i) - \chi(t_j)\|_2 + \chi(t_i)$$