pose descriptor extraction

kinect

$(x_1, \cdots, x_{15})$

$(\theta_1, \varphi_1, \cdots, \theta_9, \varphi_9, \eta)$
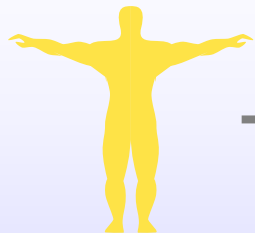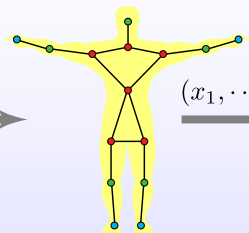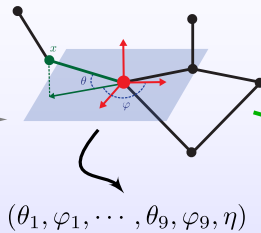
key pose learning machine

training set
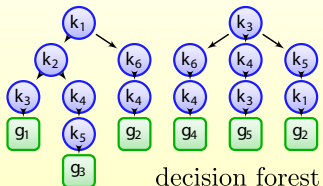
multi-class SVM

key pose

gesture learning machine

k_1
k_2
k_3
g_1
k_4
k_5
g_3
k_6
k_4
g_2
k_3
k_6
k_4
g_4
k_4
k_3
g_5
k_5
k_1
g_2

decision forest

training set

(k_1, t_1) — (k_2, t_2) — $\cdots$ — (k_n, t_n)

queue