$SVM[S(1vA)-C(0.03389)-J(1)-K(5)-Kernel(Chi2[A(655.8768)])]_BOF[K(512)-L(0)-Norm(None)-Kmeans(cpp)]-OfChannels-(DENSE[S(12-14-17-20-24-29-35-42-51-61)-Lib(mylib)]+SIFT[Norm(L2[N(1)-T(20)])-Lib(colorDescriptor)])$

April 8, 2010

Classifier: SVM one VS all (C = 0.03389, J = 1), Chi2 kernel: exp(- $1/655.8768*Chi2(X,Y)^2$), 5-fold cross-validation

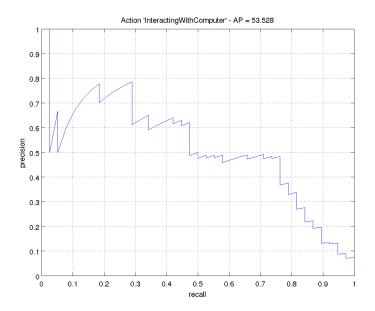
Signature: Bag of features (K = 512, histogram normalization: None, K-means

library: cpp) Channels:

(DENSE[spacing = 12-14-17-20-24-29-35-42-51-61, library: mylib]) \times (SIFT[normalization: L2((0.00)) \times

L2 (norm = 1, truncation over 0.2), library: colorDescriptor])

${\bf 1} \quad {\bf Interacting With Computer} \\$





 $Figure\ 1:\ Interacting With Computer:\ Correctly\ classified\ images,\ highest\ score$

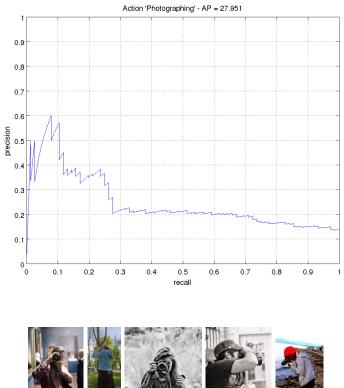


Figure 2: InteractingWithComputer: Correctly classified images, smallest score



Figure 3: InteractingWithComputer: Misclassified images, highest score

2 Photographing



(a) -0.98 (b) (c) -0.99 (d) -0.99 (e) -0.99 -0.99

Figure 4: Photographing: Correctly classified images, highest score



Figure 5: Photographing: Correctly classified images, smallest score



Figure 6: Photographing: Misclassified images, highest score

3 PlayingMusic

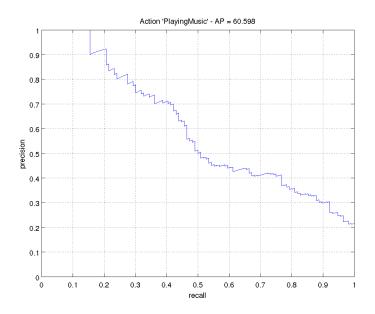




Figure 7: PlayingMusic: Correctly classified images, highest score

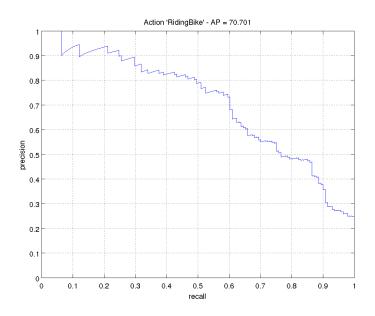


Figure 8: PlayingMusic: Correctly classified images, smallest score



 $Figure \ 9: \ Playing Music: \ Misclassified \ images, \ highest \ score$

4 RidingBike



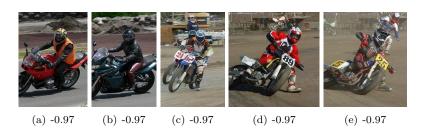


Figure 10: RidingBike: Correctly classified images, highest score



Figure 11: RidingBike: Correctly classified images, smallest score



Figure 12: RidingBike: Misclassified images, highest score

5 RidingHorse

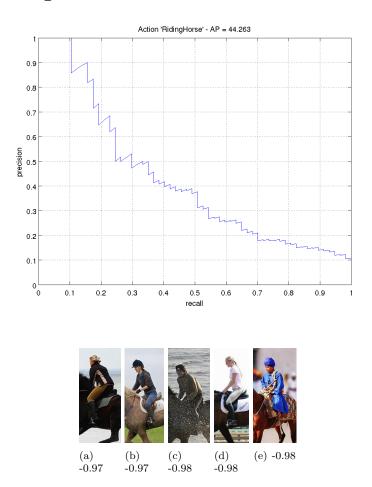


Figure 13: RidingHorse: Correctly classified images, highest score



Figure 14: RidingHorse: Correctly classified images, smallest score



Figure 15: RidingHorse: Misclassified images, highest score

6 Running

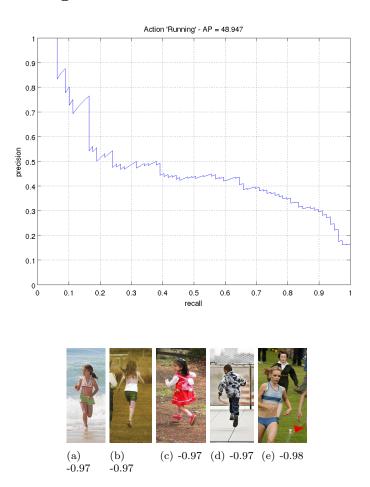


Figure 16: Running: Correctly classified images, highest score



 $Figure \ 17: \ Running: \ Correctly \ classified \ images, \ smallest \ score$

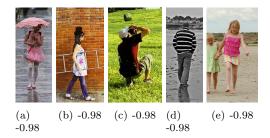


Figure 18: Running: Misclassified images, highest score

7 Walking

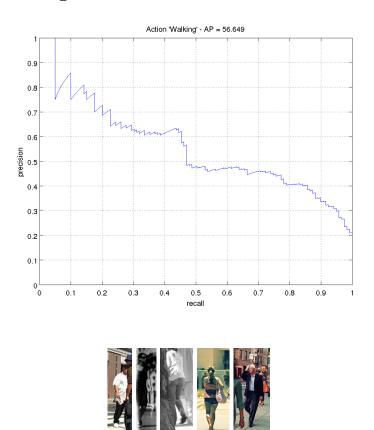


Figure 19: Walking: Correctly classified images, highest score

(a) - (b) (c) (d) 0.96 - -0.97 -0.97 0.97



Figure 20: Walking: Correctly classified images, smallest score



Figure 21: Walking: Misclassified images, highest score