Learning query-dependent prefilters for scalable image retrieval

Paper ID 1905

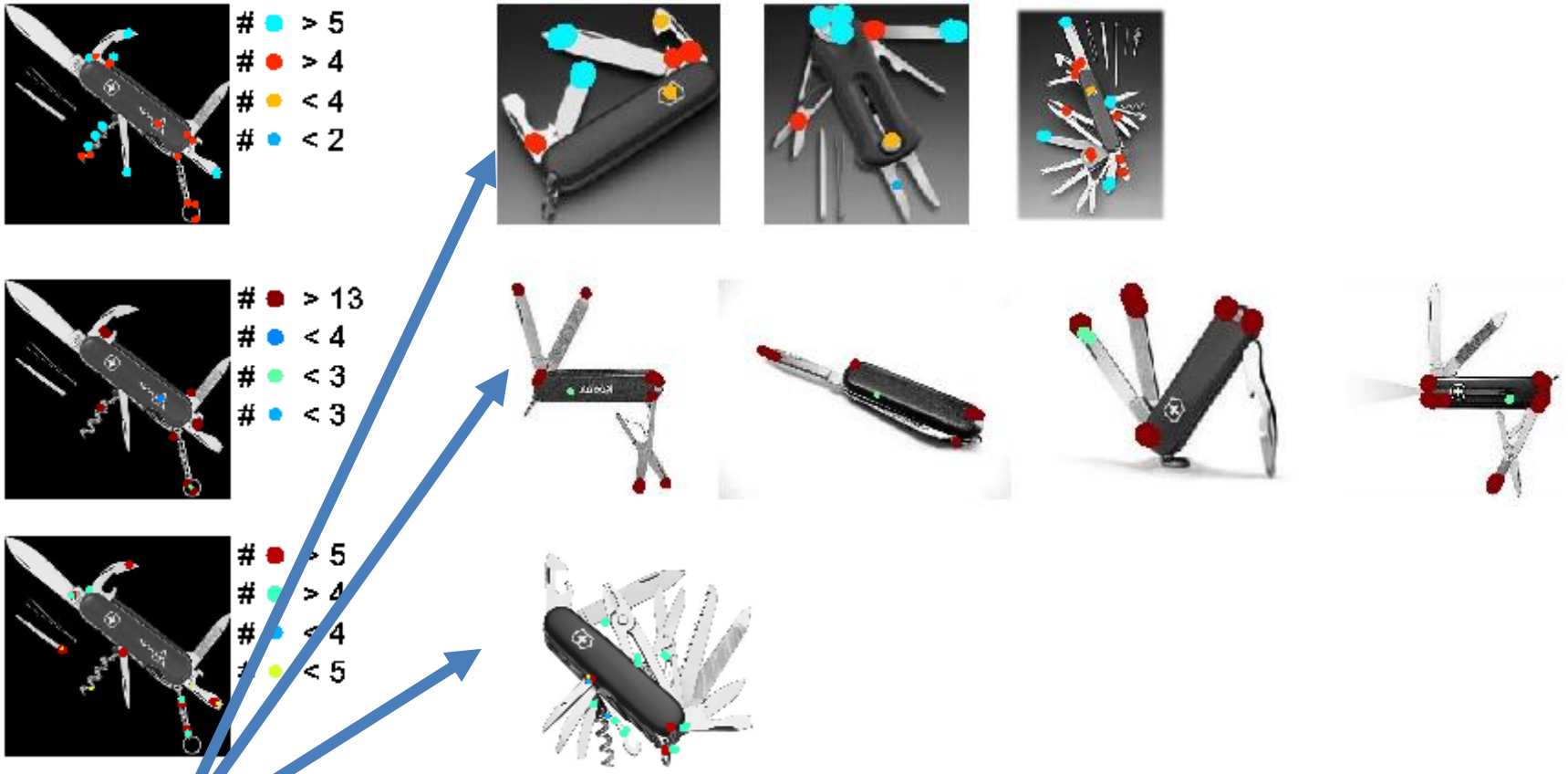
Supplementary material

Prefiltering results (for τ = 0.005)

query image

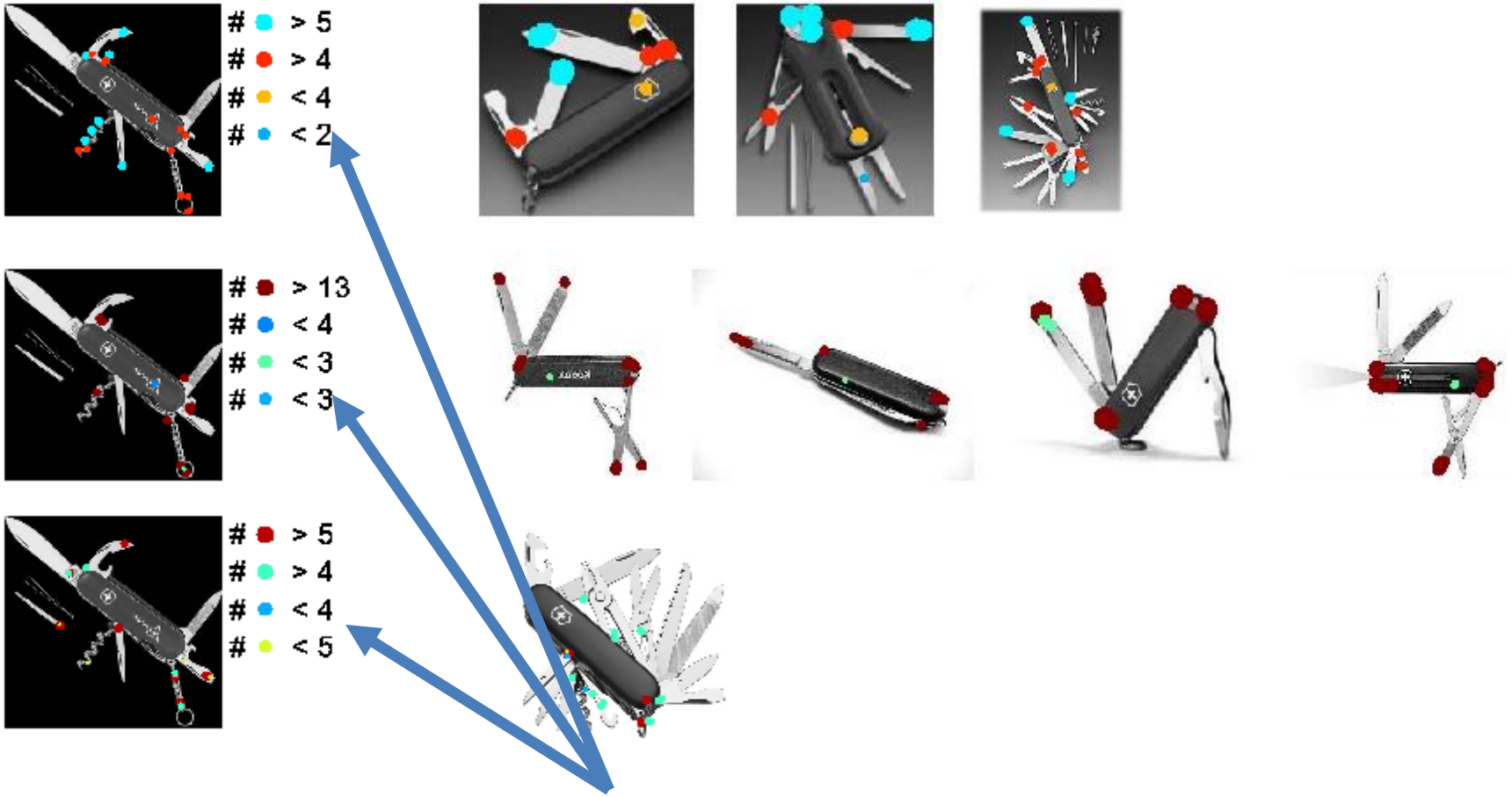
relevant images
in the filter set

Prefiltering results (for τ = 0.005)



each row shows results retrieved
by a different selected visual phrase

Prefiltering results (for τ = 0.005)

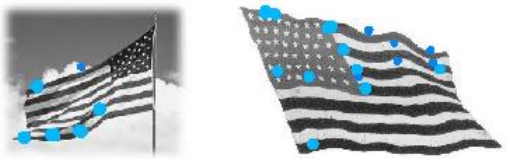


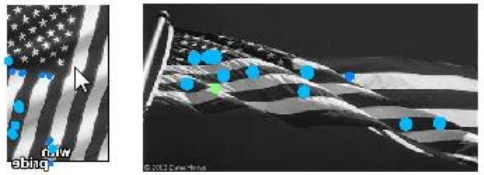
decision stumps used in each phrase
(with color-coded visual words)

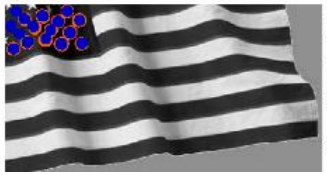
Prefiltering results (for τ = 0.005)

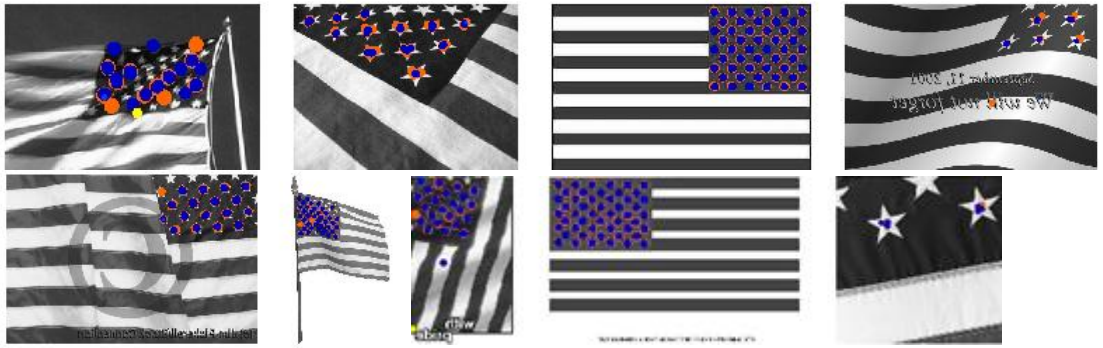
Here, as in most of our results, each selected phrase retrieves a different set of relevant results.

Prefiltering results (for τ = 0.005)

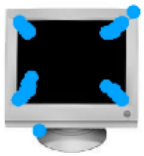




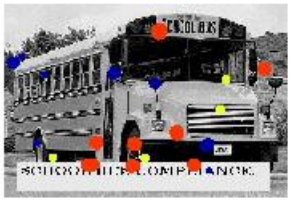




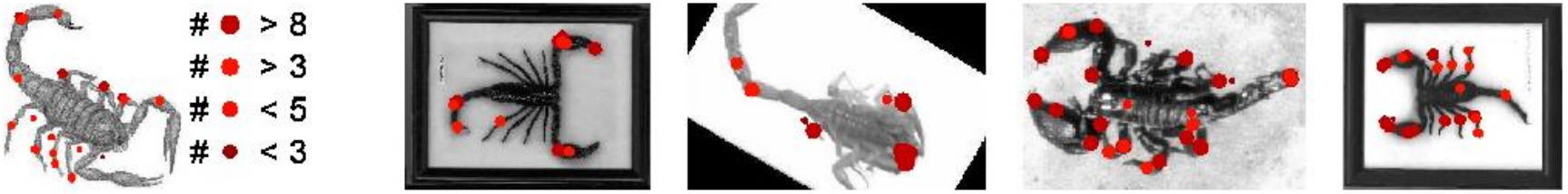
Prefiltering results (for τ = 0.005)

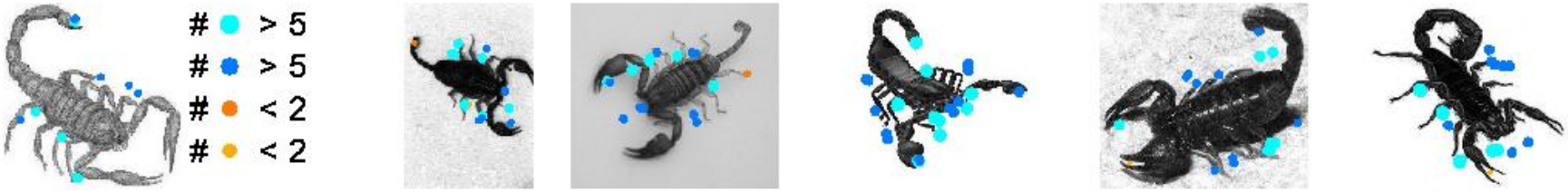


Prefiltering results (for τ = 0.005)

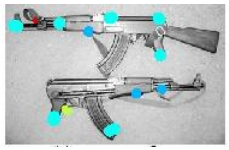


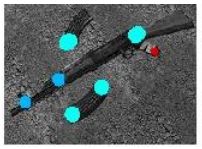
Prefiltering results (for τ = 0.005)



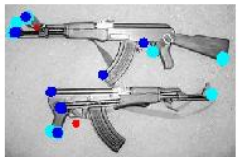


Prefiltering results (for $\tau = 0.005$)

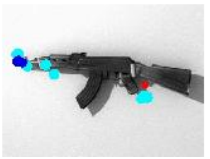







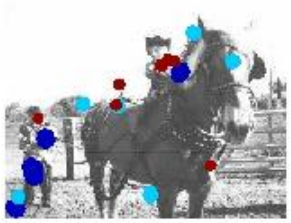




Prefiltering results (for τ = 0.005)

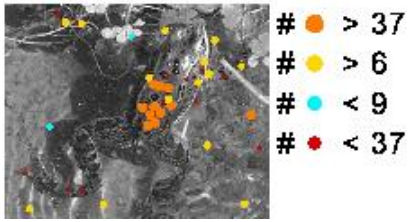
> 7
> 3
> 4
< 3

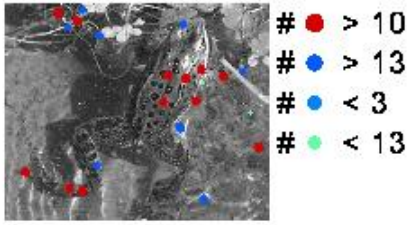
> 2
> 8
> 7
< 3

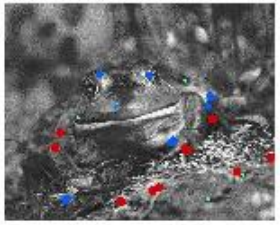


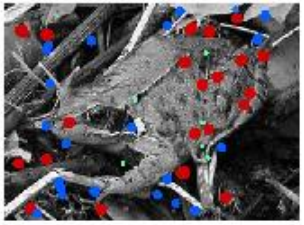
> 13
> 7
< 26
< 3

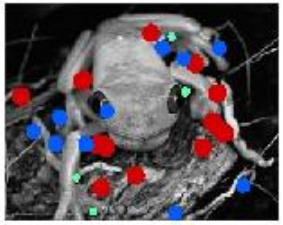
Prefiltering results (for τ = 0.005)

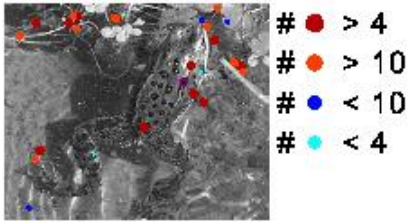


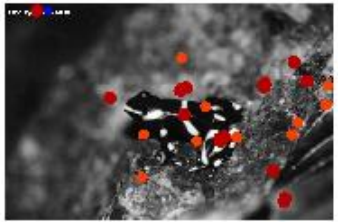






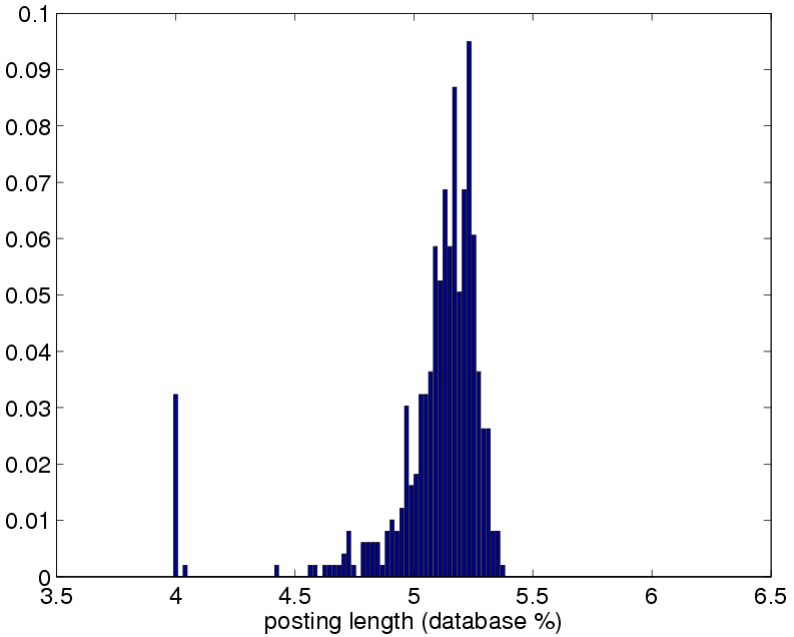




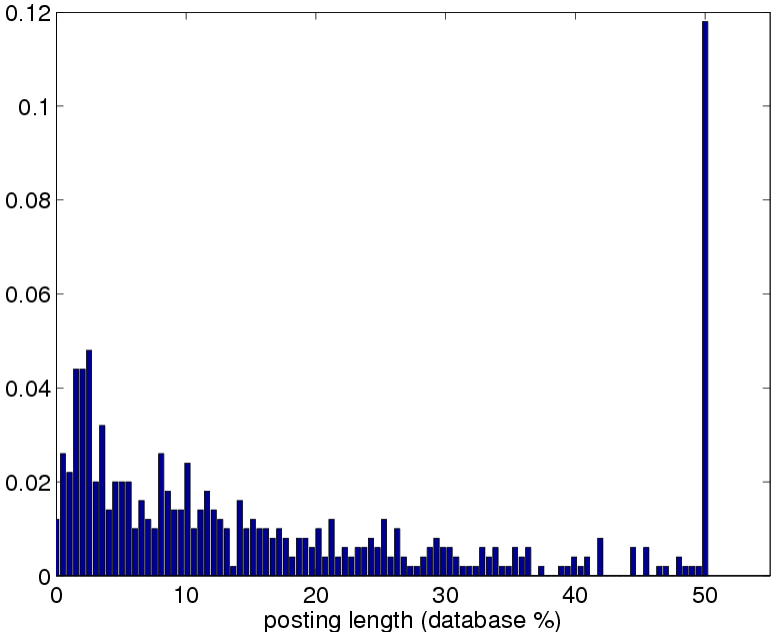


Test set distribution of postings list length (PLL)

our approach (for τ = 0.005)



[Chum et al., 2008]



- The PLL is the total cost of running the prefilter
- Our PLL distribution on the test set matches closely the bound enforced on the training set
- See Figure 4 of the paper for the distribution of filter set sizes