Additional notes on descriptors + matching
References


• **MSER:**

• Even more detectors/descriptors:
Geometric blur

Discrete points  Gaussian blur  Variable blur

The matching dilemma

• Using individual features uses precise information about spatial location *BUT it is combinatorially expensive* (graph matching problem...)

Example from Grauman and Leibe
- BoW is very fast (just comparing one pair of histogram vectors) *BUT* it completely loses all spatial information.

Detect or sample features → Describe features → Quantize to form bag of words vector for the image

Example from Grauman and Leibe
Pyramid match kernel

Example from Grauman and Leibe
Example: Scene classification

Example from Lazbenik