

Study of higher order image descriptors

Literature study

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Spatial pooling

SIFT [Low04], HOG [DT05], GLOH [MS05], DAISY PCA-SIFT

References

- [CG10] Michael Crosier and Lewis D Griffin. Using basic image features for texture classification. *International Journal of Computer Vision*, 88(3):447–460, 2010.
- [DT05] Navneet Dalal and Bill Triggs. Histograms of oriented gradients for human detection. In *Computer Vision and Pattern Recognition, 2005. CVPR 2005. IEEE Computer Society Conference on*, volume 1, pages 886–893. IEEE, 2005.
- [FMR08] Pedro Felzenszwalb, David McAllester, and Deva Ramanan. A discriminatively trained, multiscale, deformable part model. In *Computer Vision and Pattern Recognition, 2008. CVPR 2008. IEEE Conference on*, pages 1–8. IEEE, 2008.
- [LDDP12] Anders Boesen Lindbo Larsen, Sune Darkner, Anders Lindbjerg Dahl, and Kim Steenstrup Pedersen. Jet-based local image descriptors. In *Computer Vision–ECCV 2012*, pages 638–650. Springer, 2012.

- [Low04] David G Lowe. Distinctive image features from scale-invariant keypoints. *International journal of computer vision*, 60(2):91–110, 2004.
- [MS05] Krystian Mikolajczyk and Cordelia Schmid. A performance evaluation of local descriptors. *Pattern Analysis and Machine Intelligence, IEEE Transactions on*, 27(10):1615–1630, 2005.
- [PSSZI] Kim Steenstrup Pedersen, Kristoffer Stensbo-Smidt, Andrew Zirm, and Christian Igel. Shape index descriptors applied to texture-based galaxy analysis.