BIL 717 - Image Processing, Spring 2015

Asst. Prof. Erkut Erdem

READING LIST

Nonlinear Diffusion Filtering and Variational Segmentation Models

- J. Weickert, Coherence-enhancing diffusion of colour images, Image and Vision Computing, 1999

- T. Brox et al., Nonlinear structure tensors, Image and Vision Computing, 2006

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- G. Steidl and T. Teuber, Diffusion Tensors for Processing Sheared and Rotated Rectangles, IEEE Trans. Image Processing, 2009

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- J. Weickert et al., Linear osmosis models for visual computing, In Proc. EMMCVPR, 2013

Image Smoothing

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- E. S. L. Gastal and M. M. Oliveira, Adaptive Manifolds for Real-Time High-Dimensional Filtering, ACM Trans. Graph, 2012

- M. Zontak et al., Separating signal from noise using patch recurrence across scales, In Proc. CVPR, 2013

- Q. Zhang et al., 100+ Times Faster Weighted Median Filter (WMF), In Proc. CVPR, 2014

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- S. R. Fanello et al., Filter Forests for Learning Data-Dependent Convolutional Kernels, CVPR 2014

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- L. Xu et al., Unnatural L0 Sparse Representation for Natural Image Deblurring, In Proc. CVPR, 2013

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- J. Pan et al., Deblurring Text Images via L0-Regularized Intensity and Gradient Prior, In Proc. CVPR, 2014

- T. H. Kim and K. M. Lee, Segmentation-Free Dynamic Scene Deblurring, In Proc. CVPR, 2014

- T. Michaeli and M. Irani, Blind deblurring using internal patch recurrence, In Proc. ECCV, 2014

- Y. Zhou and N. Komodakis, A MAP-estimation Framework for Blind Deblurring Using High-level Edge Priors, In Proc. ECCV, 2014

Sparse Coding

- W. Dong et al., Sparsity-based image denoising via dictionary learning and structural clustering, In Proc. CVPR, 2011

- J. Mairal et al., Task-Driven Dictionary Learning, IEEE Trans. Pattern Anal. Mach. Intell., 2012

- X. Ren and L. Bo, Discriminatively Trained Sparse Code Gradients for Contour Detection, In Proc. NIPS, 2012

- L. Xu et al., Unnatural L0 Sparse Representation for Natural Image Deblurring , In Proc. CVPR, 2013

- C. Bao et al., l0 Norm Based Dictionary Learning by Proximal Methods with Global Convergence, In Proc. CVPR, 2014

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- P. Arbelaez et al., Contour Detection and Hierarchical Image Segmentation, IEEE Trans. Pattern Anal. Mach. Intell., 2011

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- J. J. Lim et al., Sketch Tokens: A Learned Mid-level Representation for Contour and Object Detection, In Proc. CVPR, 2013

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- P. Isola et al., Crisp Boundary Detection Using Pointwise Mutual Information, In Proc. ECCV, 2014

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- J. Carreira and C. Sminchisescu, Constrained Parametric Min-Cuts for Automatic Object Segmentation, In Proc. CVPR, 2010

- M. P. Kumar et al., OBJCUT: efficient segmentation using top-down and bottom-up cues, IEEE Trans. Pattern Anal. Mach. Intell., 2010

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- P. Rantalankila et al., Generating Object Segmentation Proposals using Global and Local Search, In Proc. CVPR, 2014

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- J. Kim et al., Salient Region Detection via High-Dimensional Color Transform, In Proc. CVPR, 2014

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- C. Shen and Q. Zhao, Webpage Saliency, In Proc. ECCV, 2014