Image Segmentation

List of Publications

[C1] V. Golkov, T. Sprenger, J. I. Sperl, M. I. Menzel, M. Czisch, P. Sämann and D. Cremers,
Model-Free Novelty-Based Diffusion MRI,
IEEE International Symposium on Biomedical Imaging (ISBI), Prague, Czech Republic,
April 2016.

[C2] L. Ma, C. Kerl, J. Stueckler and D. Cremers,
CPA-SLAM: Consistent Plane-Model Alignment for Direct RGB-D SLAM,
Int. Conf. on Robotics and Automation, May 2016.

[C3] J. Diebold, N. Demmel, C. Hazrba, M. Müller and D. Cremers,
Interactive Multi-label Segmentation of RGB-D Images,
Scale Space and Variational Methods in Computer Vision (SSVM), 2015.

[C4] C. Hazrba, J. Diebold and D. Cremers,
Optimizing the Relevance-Redundancy Tradeoff for Efficient Semantic Segmentation,
Scale Space and Variational Methods in Computer Vision (SSVM), 2015, Oral Presentation.

[C5] J. Stühmer and D. Cremers,
A Fast Projection Method for Connectivity Constraints in Image Segmentation,
X.-C. Tai, E. Bae, T. F. Chan and M. Lysaker(Eds.), Energy Minimization Methods in
Computer Vision and Pattern Recognition (EMMCVPR), LNCS, 2015.

Liu, V. Golkov, M. Czisch, P. Saemann, M.I. Menzel and B.H. Menze,
Using Diffusion and Structural MRI for the Automated Segmentation of
Multiple Sclerosis Lesions,
International Society for Magnetic Resonance in Medicine (ISMRM) Annual Meeting,
2015.

[C7] M. Jaimez, M. Souai, J. Stueckler, J. Gonzalez-Jimenez and D. Cremers,
Motion Cooperation: Smooth Piece-Wise Rigid Scene Flow from RGB-D Images,

[C8] V. Golkov, A. Dosovitskiy, P. Sämann, J. I. Sperl, T. Sprenger, M. Czisch, M. I. Menzel,
P. A. Gómez, A. Haase, T. Brox and D. Cremers,
q-Space Deep Learning for Twelve-Fold Shorter and Model-Free Diffusion MRI Scans,
Medical Image Computing and Computer Assisted Intervention (MICCAI), Munich, Germany,
October 2015.
[C1] M. Strobel, J. Diebold and D. Cremers,
Flow and Color Inpainting for Video Completion,
*German Conference on Pattern Recognition (GCPR)*, Münster, Germany, September 2014,
Oral Presentation.

[C2] C. Nieuwenhuis, S. Hawe, M. Kleinstueber and D. Cremers,
Co-Sparse Textural Similarity for Interactive Segmentation,

[M1] Caner Hazrba,
Feature Selection and Learning for Semantic Segmentation,
Technical University Munich, Germany, June 2014.

[J1] C. Nieuwenhuis and D. Cremers,
Spatially Varying Color Distributions for Interactive Multi-Label Segmentation,

[J2] C. Nieuwenhuis, E. Toeppe and D. Cremers,
A Survey and Comparison of Discrete and Continuous Multi-label Optimization Approaches for the Potts Model,

[BC1] M. Klodt, F. Steinbruecker and D. Cremers,
Moment Constraints in Convex Optimization for Segmentation and Tracking,

[C1] M. Souiai, C. Nieuwenhuis, E. Strekalovskiy and D. Cremers,
Convex Optimization for Scene Understanding,
*ICCV Workshop on Graphical Models for Scene Understanding*, 2013.

[C2] J. Bergbauer, C. Nieuwenhuis, M. Souiai and D. Cremers,
Proximity Priors for Variational Semantic Segmentation and Recognition,
*ICCV Workshop on Graphical Models for Scene Understanding*, 2013.

[C3] E. Toeppe, C. Nieuwenhuis and D. Cremers,
Volume Constraints for Single View Reconstruction,
*IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, Portland, USA, 2013.

[C4] J. Lellmann, E. Strekalovskiy, S. Koetter and D. Cremers,
Total Variation Regularization for Functions with Values in a Manifold,
*IEEE International Conference on Computer Vision (ICCV)*, Sydney, Australia, December 2013.

[C5] C. Nieuwenhuis, E. Strekalovskiy and D. Cremers,
Proportion Priors for Image Sequence Segmentation,
*IEEE International Conference on Computer Vision (ICCV)*, Sydney, Australia, December 2013.
[C6] J. Stühmer, P. Schröder and D. Cremers,
Tree Shape Priors with Connectivity Constraints using Convex Relaxation on General Graphs,
*IEEE International Conference on Computer Vision (ICCV)*, Sydney, Australia, December 2013, Oral Presentation.

[C7] L. Gorelick, F. R. Schmidt and Y. Boykov,
Fast Trust Region for Segmentation,

[J1] T. Schoenemann, F. Kahl, S. Masnou and D. Cremers,
A linear framework for region-based image segmentation and inpainting involving curvature penalization,

[J2] D. Cremers,
Optimal Solutions for Semantic Image Decomposition,

[C1] E. Strekalovskiy, C. Nieuwenhuis and D. Cremers,
Nonmetric Priors for Continuous Multilabel Optimization,

[C2] N. Ufer, M. Souiai and D. Cremers,
Wehrli 2.0: An Algorithm for Tidying up Art,

[C3] F. R. Schmidt and Y. Boykov,
Hausdorff Distance Constraint for Multi-Surface Segmentation,

[C4] L. Gorelick, F. R. Schmidt, Y. Boykov, A. Delong and A. Ward,
Segmentation with non-linear regional constraints via line-search cuts,

[BC1] D. Cremers,
Image Segmentation with Shape Priors: Explicit Versus Implicit Representations,
[C1] C. Nieuwenhuis, E. Toeppe and D. Cremers,
Space-Varying Color Distributions for Interactive Multiregion Segmentation: Discrete versus Continuous Approaches,

[C2] M. Klodt and D. Cremers,
A Convex Framework for Image Segmentation with Moment Constraints,
IEEE International Conference on Computer Vision (ICCV), 2011.

[C3] A. Delong, L. Gorelick, F. R. Schmidt, O. Veksler and Y. Boykov,
Interactive Segmentation with Super-Labels,

[C1] C. Nieuwenhuis, B. Berkels, M. Rumpf and D. Cremers,
Interactive Motion Segmentation,

[C1] D. Cremers, O. Fluck, M. Rousson and S. Aharon,
A probabilistic level set formulation for interactive organ segmentation,

[C1] T. Brox, A. Bruhn and J. Weickert,
Variational motion segmentation with level sets,

[C2] D. Cremers and L. Grady,
Statistical priors for combinatorial optimization: efficient solutions via Graph Cuts,

[C3] O. Fluck, S. Aharon, D. Cremers and M. Rousson,
GPU histogram computation,
ACM SIGGRAPH posters and demos, 2006.

[C4] T. Kohlberger, D. Cremers, M. Rousson and R. Ramaraj,
4D shape priors for level set segmentation of the left myocardium in SPECT sequences,
[C1] S. Manay, D. Cremers, A. J. Yezzi and S. Soatto,
One-shot integral invariant shape priors for variational segmentation,

[C2] M. Rousson and D. Cremers,
Efficient kernel density estimation of shape and intensity priors for level set segmentation,

[C1] D. Cremers and C. Schnörr,
Statistical shape knowledge in variational motion segmentation,
A. Pece, Y. N. Wu and R. Larsen(Eds.), 1st Internat. Workshop on Generative-Model-Based Vision, Copenhagen, Univ. of Copenhagen, June, 2 2002.