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] C. Hazirbas, L. Ma, C. Domokos and D. Cremers, 
FuseNet: Incorporating Depth into Semantic Segmentation via Fusion-based CNN Architecture, 
*Asian Conference on Computer Vision*, 2016.

[C1] J. Diebold, N. Demmel, C. Hazirbas, M. Miller and D. Cremers, 
Interactive Multi-label Segmentation of RGB-D Images, 
*Scale Space and Variational Methods in Computer Vision (SSVM)*, 2015.

[C2] C. Hazirbas, 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.

[C3] J. Stühmer and D. Cremers, 
A Fast Projection Method for Connectivity Constraints in Image Segmentation, 

Using Diffusion and Structural MRI for the Automated Segmentation of Multiple Sclerosis Lesions, 

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.

[C6] M. Jaimez, M. Souiai, J. Stueckler, J. Gonzalez-Jimenez and D. Cremers, 
Motion Cooperation: Smooth Piece-Wise Rigid Scene Flow from RGB-D Images, 
[C7] M. Souiai, M. R. Oswald, Y. Kee, J. Kim, M. Pollefeys and D. Cremers,
*Entropy Minimization for Convex Relaxation Approaches*,
*IEEE International Conference on Computer Vision (ICCV)*, Santiago, Chile, 2015.

[C8] N. Nagaraja, F. R. Schmidt and T. Brox,
*Video Segmentation with Just a Few Strokes*,
*IEEE International Conference on Computer Vision (ICCV)*, Santiago, Chile, Dec 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. Kleinsteuber and D. Cremers,
*Co-Sparse Textural Similarity for Interactive Segmentation*,

[M1] Caner Hazirbas,
*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,  
**Wehri 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. Toepppe 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.