Journal Publications

[J1] Thomas Frerix, Matthias Niesner and Daniel Cremers,
Linear Inequality Constraints for Neural Network Activations,

[J2] J. Engel, V. Koltun and D. Cremers,
Direct Sparse Odometry,
March 2018.

[J3] N. Yang, R. Wang, X. Gao and D. Cremers,
Challenges in Monocular Visual Odometry: Photometric Calibration, Motion Bias and Rolling Shutter Effect,

LED-based Photometric Stereo: Modeling, Calibration and Numerical Solution,

[J5] Haefner, B., Peng, S., Verma, A., Queau, Y., Cremers and D.,
Photometric Depth Super-Resolution,

[J6] Melou, J., Queau, Y., Durou, J.-D., Castan, F., Cremers and D.,
Variational Reflectance Estimation from Multi-view Images,

[J7] P. Bergmann, R. Wang and D. Cremers,
Online Photometric Calibration of Auto Exposure Video for Realtime Visual Odometry and SLAM,

Omnidirectional DSO: Direct Sparse Odometry with Fisheye Cameras,

[J9] L. Ma., J. Stueckler, T. Wu and D. Cremers,
Detailed Dense Inference with Convolutional Neural Networks via Discrete Wavelet Transform,
Aug 2018.

[J10] Tjaden, Henning, Schwanecke, Ulrich, Schömer, Elmar, Cremers and Daniel,
A Region-based Gauss-Newton Approach to Real-Time Monocular Multiple Object Tracking,

Tau Like Proteins Reduce Torque Generation in Microtubule Bundles,
[J12] E. Rodola, L. Cosmo, M. M. Bronstein, A. Torsello and D. Cremers,  
Partial Functional Correspondence,  

[J13] L. Cosmo, E. Rodola, A. Albarelli, F. Memoli and D. Cremers,  
Consistent Partial Matching of Shape Collections via Sparse Modeling,  

[J14] D. Boscaini, J. Masci, E. Rodola, M. M. Bronstein and D. Cremers,  
Anisotropic Diffusion Descriptors,  

q-Space Deep Learning: Twelve-Fold Shorter and Model-Free Diffusion MRI Scans,  
35: 2016, Special Issue on Deep Learning.

[J16] O. Litany, E. Rodola, A. M. Bronstein, M. M. Bronstein and D. Cremers,  
Non-Rigid Puzzles,  

[J17] Vestner, M., Litman, R., Bronstein, A., Rodola, E., Cremers and D.,  
Bayesian Inference of Bijective Non-Rigid Shape Correspondence,  

[J18] J. Diebold, C. Nieuwenhuis and D. Cremers,  
Midrange Geometric Interactions for Semantic Segmentation,  
2015.

[J19] J. Diebold, S. Tari and D. Cremers,  
The Role of Diffusion in Figure Hunt Games,  

[J20] S. Madhogaria, P. M. Baggenstoss, M. Schikora, W. Koch and D. Cremers,  
Car detection by fusion of HOG and causal MRF,  

[J21] M. Klodt, K. Herzog, R. Töpfer and D. Cremers,  
Field phenotyping of grapevine growth using dense stereo reconstruction,  

[J22] E. Rodola, A. Albarelli, D. Cremers and A. Torsello,  
A Simple and Effective Relevance-based Point Sampling for 3D Shapes,  

[J23] R. Mecca, E. Rodola and D. Cremers,  
Realistic Photometric Stereo Using Partial Differential Irradiance Equation Ratios,  

[J24] T. Möllenhoff, E. Strekalovskiy, M. Möller and D. Cremers,  
The Primal-Dual Hybrid Gradient Method for Semiconvex Splittings,  
[J25] B. Goldluecke, M. Aubry, K. Kolev and D. Cremers,  
A Super-resolution Framework for High-Accuracy Multiview Reconstruction,  

[J26] E. Strekalovskiy, A. Chambolle and D. Cremers,  
Convex Relaxation of Vectorial Problems with Coupled Regularization,  

[J27] J. Engel, J. Sturm and D. Cremers,  
Scale-Aware Navigation of a Low-Cost Quadrocopter with a Monocular Camera,  

[J28] E. Rodola, S. Rota Bulo and D. Cremers,  
Robust Region Detection via Consensus Segmentation of Deformable Shapes,  

[J29] C. Nieuwenhuis and D. Cremers,  
Spatially Varying Color Distributions for Interactive Multi-Label Segmentation,  

[J30] C. Nieuwenhuis, E. Toeppe and D. Cremers,  
A Survey and Comparison of Discrete and Continuous Multi-label Optimization Approaches for the Potts Model,  

[J31] B. Goldluecke, E. Strekalovskiy and D. Cremers,  
Tight Convex Relaxations for Vector-Valued Labeling,  

[J32] F. Endres, J. Hess, J. Sturm, D. Cremers and W. Burgard,  
3D Mapping with an RGB-D Camera,  

[J33] Liu, Z., Beetz, M., Cremers, D., Gall, J., Li, W., Pangercic, D., Sturm, J., Tai and Y.-W.,  
Introduction to the special issue on visual understanding and applications with RGB-D cameras,  

[J34] A. Chambolle, D. Cremers and T. Pock,  
A Convex Approach to Minimal Partitions,  

[J35] T. Schoenemann and D. Cremers,  
A Coding Cost Framework for Super-resolution Motion Layer Decomposition,  

[J36] T. Schoenemann, F. Kahl, S. Masnou and D. Cremers,  
A linear framework for region-based image segmentation and inpainting involving curvature penalization,  
[J37] D. Cremers, 
Optimal Solutions for Semantic Image Decomposition, 

[J38] S. Chen, D. Cremers and R. J. Radke, 
Image segmentation with one shape prior - A template-based formulation, 

[J39] B. Goldluecke, E. Strekalovskiy and D. Cremers, 
The Natural Total Variation Which Arises from Geometric Measure Theory, 

[J40] K. Kolev, T. Brox and D. Cremers, 
Fast Joint Estimation of Silhouettes and Dense 3D Geometry from Multiple Images, 

An image classification approach to analyze the suppression of plant immunity by the human pathogen Salmonella Typhimurium, 

[J42] D. Cremers and E. Strekalovskiy, 
Total Cyclic Variation and Generalizations, 

[J43] T. Windheuser, U. Schlickewei, F. R. Schmidt and D. Cremers, 
Large-Scale Integer Linear Programming for Orientation-Preserving 3D Shape Matching, 

[J44] D. Cremers and K. Kolev, 
Multiview Stereo and Silhouette Consistency via Convex Functionals over Convex Domains, 

Stereoscopic Scene Flow Computation for 3D Motion Understanding, 

[J46] T. Schoenemann, S. Masnou and D. Cremers, 
The Elastic Ratio: Introducing Curvature into Ratio-Based Globally Optimal Image Segmentation, 
20(9): 2565-2581, 2011.

[J47] A. Sellent, M. Eisemann, B. Goldluecke, D. Cremers and M. Magnor, 
Motion Field Estimation from Alternate Exposure Images, 
A Variational Approach to Vesicle Membrane Reconstruction from Fluorescence Imaging,

[J49] T. Pock, D. Cremers, H. Bischof and A. Chambolle,
Global Solutions of Variational Models with Convex Regularization,

[J50] T. Schoenemann and D. Cremers,
A Combinatorial Solution for Model-based Image Segmentation and Real-time Tracking,

[J51] T. Brox and D. Cremers,
On local region models and a statistical interpretation of the piecewise smooth Mumford-Shah functional,

[J52] T. Brox, B. Rosenhahn, J. Gall and D. Cremers,
Combined region- and motion-based 3D tracking of rigid and articulated objects,

[J53] K. Kolev, M. Klodt, T. Brox and D. Cremers,
Continuous Global Optimization in Multiview 3D Reconstruction,

[J54] A. Wedel, C. Rabe, H. Badino, H. Loose, U. Franke and D. Cremers,
B-Spline Modeling of Road Surfaces with an Application to Free Space Estimation,

[J55] T. Brox, O. Kleinschmidt and D. Cremers,
Efficient Nonlocal Means for Denoising of Textural Patterns,

[J56] D. Cremers,
Nonlinear Dynamical Shape Priors for Level Set Segmentation,

[J57] H. Jin, D. Cremers, D. Wang, A. Yezzi, E. Prados and S. Soatto,
3-D Reconstruction of Shaded Objects from Multiple Images Under Unknown Illumination,

[J58] D. Cremers,
Computer Lernen Sehen,

[J59] D. Cremers, M. Rousson and R. Deriche,
A review of statistical approaches to level set segmentation: integrating color, texture, motion and shape,
[J60] D. Cremers,
Dynamical statistical shape priors for level set based tracking,

[J61] D. Cremers, S. J. Osher and S. Soatto,
Kernel density estimation and intrinsic alignment for shape priors in level set segmentation,

[J62] D. Cremers, N. Sochen and C. Schnörr,
A multiphase dynamic labeling model for variational recognition-driven image segmentation,

[J63] S. Manay, D. Cremers, B.-W. Hong, A. Yezzi and S. Soatto,
Integral invariants for shape matching,

[J64] D. Cremers and S. Soatto,
Motion Competition: A variational framework for piecewise parametric motion segmentation,

[J65] D. Cremers, T. Kohlberger and C. Schnörr,
Shape Statistics in Kernel Space for Variational Image Segmentation,

[J66] D. Cremers and C. Schnörr,
Statistical shape knowledge in variational motion segmentation,

[J67] J. Keuchel, C. Schnörr, C. Schellewald and D. Cremers,
Binary partitioning, perceptual grouping, and restoration with semidefinite programming,

[J68] D. Cremers and A. V. M. Herz,
Travelling waves of exitation in neural field models: Equivalence of rate descriptions and integrate-and-fire dynamics,

[J69] D. Cremers, F. Tischhäuser, J. Weickert and C. Schnörr,
Diffusion Snakes: Introducing statistical shape knowledge into the Mumford–Shah functional,

[J70] D. Cremers and A. Mielke,
Flow equations for the Hénon-Heiles Hamiltonian,

Books
Author: D. Cremers  

List of Publications

[B1] A. Wedel and D. Cremers,  
Stereoscopic Scene Flow for 3D Motion Analysis,  
Springer 2011.

Energy Minimization Methods for Computer Vision and Pattern Recognition (EMMCVPR),  

Book Chapters

[BC1] Vestner, M., Rodola, E., Windheuser, T., Bulo, Rota Bulo, S., Cremers and D.,  
Applying Random Forests to the Problem of Dense Non-rigid Shape Correspondence,  

[BC2] V. Golkov, J. M. Portegies, A. Golkov, R. Duits and D. Cremers,  
Holistic Image Reconstruction for Diffusion MRI,  
Computational Diffusion MRI, Munich, Germany, Springer, October 2015, Book Chapter, and Oral Presentation at MICCAI 2015 Workshop on Computational Diffusion MRI.

Joint Super-Resolution Using Only One Anisotropic Low-Resolution Image per q-Space Coordinate,  
Computational Diffusion MRI, Springer, 2014, Book Chapter, and Oral Presentation at MICCAI 2014 Workshop on Computational Diffusion MRI.

[BC4] M. Klodt, F. Steinbruecker and D. Cremers,  
Moment Constraints in Convex Optimization for Segmentation and Tracking,  

[BC5] M. Schikora, W. Koch, R. L. Streit and D. Cremers,  
A Sequential Monte Carlo Method for Multi-Target Tracking with the Intensity Filter,  

[BC6] D. Cremers, T. Pock, K. Kolev and A. Chambolle,  
Convex Relaxation Techniques for Segmentation, Stereo and Multiview Reconstruction,  

[BC7] D. Cremers,  
Image Segmentation with Shape Priors: Explicit Versus Implicit Representations,  

[BC8] A. Chambolle, V. Caselles, D. Cremers, M. Novaga and T. Pock,  
An Introduction to Total Variation for Image Analysis,  
Author: D. Cremers

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[BC9] T. Brox, B. Rosenhahn and D. Cremers,
Contours, optic flow, and prior knowledge: cues for capturing 3D human motion in videos,

[BC10] D. Cremers and M. Rousson,
Efficient kernel density estimation of shape and intensity priors for level set segmentation,

[BC11] D. Cremers and T. Kohlberger,
Probabilistic kernel PCA and its application to statistical shape modeling and inference,

[BC12] S. Manay, D. Cremers, B. W. Hong, A. Yezzi and S. Soatto,
Integral Invariants and Shape Matching,

[BC13] M. Möllenhoff, D. Cremers and C. Schnörr,
Variational segmentation with shape priors,

Publications at Conferences and Workshops

[C1] Caner Hazirbas, Sebastian Georg Soyer, Maximilian Christian Staab, Laura Leal-Taixe and Daniel Cremers,
Asian Conference on Computer Vision (ACCV), December 2018.

[C2] Haefner, B., Queau, Y., Möllenhoff, T., Cremers and D.,
Fight ill-posedness with ill-posedness: Single-shot variational depth super-resolution from shading,
*IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2018, Spotlight Presentation.

[C3] T. Möllenhoff, Z. Ye, T. Wu and D. Cremers,
Combinatorial Preconditioners for Proximal Algorithms on Graphs,
*International Conference on Artificial Intelligence and Statistics (AISTATS)*, 2018.

q-Space Novelty Detection in Short Diffusion MRI Scans of Multiple Sclerosis, 2018.

[C6] B. T. Do, V. Golkov, G. E. Gürel and D. Cremers,
Precursor microRNA Identification Using Deep Convolutional Neural Networks,

[C7] E. Aljalbout, V. Golkov, Y. Siddiqui and D. Cremers,
Clustering with Deep Learning: Taxonomy and New Methods,

[C8] P. Haeusser, J. Plapp, V. Golkov, E. Aljalbout and D. Cremers,
Associative Deep Clustering - Training a Classification Network with no Labels,
Proc. of the German Conference on Pattern Recognition (GCPR), October 2018.

[C9] Nikolaus Mayer, Eddy Ilg, Philipp Fischer, Caner Hazirbas, Daniel Cremers, Alexey Dosovitskiy and Thomas Brox,
What Makes Good Synthetic Training Data for Learning Disparity and Optical Flow Estimation?,
September 2018.

[C10] T. Frerix, T. Möllenhoff, M. Moeller and D. Cremers,
Proximal Backpropagation,

Discrete-Continuous ADMM for Transductive Inference in Higher-Order MRFs,
2018.

[C12] L. von Stumberg, V. Usenko and D. Cremers,
Direct Sparse Visual-Inertial Odometry using Dynamic Marginalization,
May 2018.

The TUM VI Benchmark for Evaluating Visual-Inertial Odometry,
October 2018.

[C14] X. Gao, R. Wang, N. Demmel and D. Cremers,
LDSO: Direct Sparse Odometry with Loop Closure,
October 2018.

[C15] A. Vasilev, V. Golkov, I. Lipp, E. Sgarlata, V. Tomassini, D. K. Jones and D. Cremers,
q-Space Novelty Detection with Variational Autoencoders,

[C16] M. Eisenberger, Z. Lähner and D. Cremers,
Divergence-Free Shape Interpolation and Correspondence,

[C17] Z. Lähner, D. Cremers and T. Tung,
DeepWrinkles: Accurate and Realistic Clothing Modeling,
September 2018, Oral Presentation.
[C18] N. Yang, R. Wang, J. Stueckler and D. Cremers,
Deep Virtual Stereo Odometry: Leveraging Deep Depth Prediction for Mono-
cular Direct Sparse Odometry,
September 2018, Oral Presentation.

[C19] D. Schubert, N. Demmel, V. Usenko, J. Stueckler and D. Cremers,
Direct Sparse Odometry With Rolling Shutter,
September 2018, Oral Presentation.

[C20] V. Usenko, N. Demmel and D. Cremers,
The Double Sphere Camera Model,

[C21] I. Chiotellis, F. Zimmermann, D. Cremers and R. Triebel,
Incremental Semi-Supervised Learning from Streams for Object Classification,

[C22] V. Estellers, F. Schmidt and D. Cremers,
Robust Fitting of Subdivision Surfaces for Smooth Shape Analysis,
Proc. of the Int. Conference on 3D Vision (3DV), September 2018, Received the Best
Paper Award at 3DV 2018.

[C23] P. Wenzel, Q. Khan, D. Cremers and L. Leal-Taixe,
Modular Vehicle Control for Transferring Semantic Information Between Wea-
ther Conditions Using GANs,
Conference on Robot Learning (CoRL), 2018.

[C24] M. Jaimez, C. Kerl, J. Gonzalez-Jimenez and D. Cremers,
Fast Odometry and Scene Flow from RGB-D Cameras based on Geometric
Clustering,
Proc. of the IEEE Int. Conf. on Robotics and Automation (ICRA), 2017.

[C25] M. Jaimez, T. J. Cashman, A. Fitzgibbon, J. Gonzalez-Jimenez and D. Cremers,
An Efficient Background Term for 3D Reconstruction and Tracking with
Smooth Subdivision Surface Models,
2017.

[C26] L. Ma, J. Stueckler, C. Kerl and D. Cremers,
Multi-View Deep Learning for Consistent Semantic Mapping with RGB-D
Cameras,
Vancouver, Canada, Sep 2017.

[C27] Vestner, M., Litman, R., Rodola, E., Bronstein, A., Cremers and D.,
Product Manifold Filter: Non-Rigid Shape Correspondence via Kernel Density
Estimation in the Product Space,
2017.

[C28] Dzitsiuk, M., Sturm, J., Maier, R., Ma, L., Cremers and D.,
De-noising, Stabilizing and Completing 3D Reconstructions On-the-go using
Plane Priors,

[C29] L. von Stumberg, V. Usenko, J. Engel, J. Stueckler and D. Cremers,
From Monocular SLAM to Autonomous Drone Exploration,
European Conference on Mobile Robots (ECMR), September 2017.
Author: D. Cremers

List of Publications

[C30] Florian Walch, Caner Hazirbas, Laura Leal-Taixe, Torsten Sattler, Sebastian Hilsenbeck and Daniel Cremers,  
Image-based localization using LSTMs for structured feature correlation, October 2017.

Establishment of an interdisciplinary workflow of machine learning-based Radiomics in sarcoma patients,  

[C32] V. Golkov, M. J. Skwark, A. Mirchev, G. Dikov, A. R. Geanes, J. Mendenhall, J. Meiler and D. Cremers,  
3D Deep Learning for Biological Function Prediction from Physical Fields,  

[C33] Queau, Y., Pizenberg, M., Durou, J.-D., Cremers and D.,  
Microgeometry capture and RGB albedo estimation by photometric stereo without demosaicing,  
International Conference on Quality Control by Artificial Vision (QCAV), 2017.

[C34] P. Haeusser, A. Mordvintsev and D. Cremers,  
Learning by Association - A versatile semi-supervised training method for neural networks,  
2017.

[C35] Miroslava Slavcheva, Maximilian Baust, Daniel Cremers and Slobodan Ilic,  
KillingFusion: Non-rigid 3D Reconstruction without Correspondences,  
2017.

[C36] V. Usenko, L. von Stumberg, A. Pangercic and D. Cremers,  
Real-Time Trajectory Replanning for MAVs using Uniform B-splines and a 3D Circular Buffer,  
Vancouver, Canada, Sep 2017, Best Paper Award - Finalist.

[C37] Queau, Y., Wu, T., Cremers and D.,  
Semi-Calibrated Near-Light Photometric Stereo,  
International Conference on Scale Space and Variational Methods in Computer Vision (SSVM), Kolding, Denmark, Lecture Notes in Computer Science, Vol. , , 2017.

[C38] Melou, J., Queue, Y., Durou, J.-D., Castan, F., Cremers and D,  
Beyond Multi-view Stereo: Shading-Reflectance Decomposition,  
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[C39] Queau, Y., Wu, T., Lauze, F., Durou, J.-D., Cremers and D.,  
A Non-Convex Variational Approach to Photometric Stereo under Inaccurate Lighting,  
Honolulu, USA, 2017.

[C40] Tim Meinhardt, Michael Moeller, Caner Hazirbas and Daniel Cremers,  
Learning Proximal Operators: Using Denoising Networks for Regularizing Inverse Imaging Problems,  
October 2017.


[C48] Peng, S., Haefner, B., Queau, Y., Cremers and D., *Depth Super-Resolution Meets Uncalibrated Photometric Stereo*, *International Conference on Computer Vision Workshops (ICCVW)*, 2017, Oral Presentation at ICCV Workshop on Color and Photometry in Computer Vision.


[C53] J. Kukacka, V. Golkov and D. Cremers, 
Regularization for Deep Learning: A Taxonomy, 

[C54] V. Golkov, T. Sprenger, J. I. Sperl, M. I. Menzel, M. Czisch, P. Sämann and D. Cremers, 
Model-Free Novelty-Based Diffusion MRI, 
Prague, Czech Republic, April 2016.

[C55] V. Golkov, M. J. Skwark, A. Golkov, A. Dosovitskiy, T. Brox, J. Meiler and D. Cremers, 
Protein Contact Prediction from Amino Acid Co-Evolution Using Convolutional 
Networks for Graph-Valued Images, 
Barcelona, Spain, December 2016, Oral Presentation (acceptance rate: under 2%).

[C56] Z. Lähner, E. Rodola, F. R. Schmidt, M. M. Bronstein and D. Cremers, 
Efficient Globally Optimal 2D-to-3D Deformable Shape Matching, 
May 2016.

[C57] V. Usenko, J. Engel, J. Stueckler and D. Cremers, 
Direct Visual-Inertial Odometry with Stereo Cameras, 
May 2016.

[C58] A. Narr, R. Triebel and D. Cremers, 
Stream-based Active Learning for Efficient and Adaptive Classification of 3D 
Objects, 
May 2016.

SHREC16: Matching of Deformable Shapes with Topological Noise, 
May 2016.

[C60] L. Cosmo, E. Rodola, M. M. Bronstein, A. Torsello, D. Cremers and Y. Sahillioglu, 
SHREC16: Partial Matching of Deformable Shapes, 
May 2016.

[C61] T. Möllenhoff, E. Laude, M. Moeller, J. Lellmann and D. Cremers, 
Sublabel-Accurate Relaxation of Nonconvex Energies, 
2016, Oral Presentation, Received the Best Paper Honorable Mention Award at CVPR 2016.

[C62] L. Ma, C. Kerl, J. Stueckler and D. Cremers, 
CPA-SLAM: Consistent Plane-Model Alignment for Direct RGB-D SLAM, 
May 2016.

[C63] J. Engel, V. Usenko and D. Cremers, 
A Photometrically Calibrated Benchmark For Monocular Visual Odometry, 

[C64] J. Engel, V. Koltun and D. Cremers, 
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[C65] E. Laude, T. Möllenhoff, M. Moeller, J. Lellmann and D. Cremers, 
Sublabel-Accurate Convex Relaxation of Vectorial Multilabel Energies, 
October 2016.
[C66] I. Chiotellis, R. Triebel, T. Windheuser and D. Cremers, 
Non-Rigid 3D Shape Retrieval via Large Margin Nearest Neighbor Embedding, 
October 2016.

[C67] C. Hazirbas, L. Ma, C. Domokos and D. Cremers, 
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A Convex Solution to Spatially-Regularized Correspondence Problems, 
October 2016.

[C69] S. Sharifzadeh, I. Chiotellis, R. Triebel and D. Cremers, 
Learning to Drive using Inverse Reinforcement Learning and Deep Q-Networks, 
NIPS Workshops, December 2016.

[C70] M. Moeller, J. Diebold, G. Gilboa and D. Cremers, 
Learning Nonlinear Spectral Filters for Color Image Reconstruction, 
2015.

[C71] J. Diebold, N. Demmel, C. Hazirbas, M. Möller and D. Cremers, 
Interactive Multi-label Segmentation of RGB-D Images, 
2015.

[C72] C. Hazirbas, J. Diebold and D. Cremers, 
Optimizing the Relevance-Redundancy Tradeoff for Efficient Semantic Segmentation, 
2015, Oral Presentation.

[C73] T. Möllenhoff, E. Strekalovskiy, M. Möller and D. Cremers, 
Low Rank Priors for Color Image Regularization, 
2015.

[C74] M. Jaimez, M. Souiai, J. Gonzalez-Jimenez and D. Cremers, 
A Primal-Dual Framework for Real-Time Dense RGB-D Scene Flow, 
Proc. of the IEEE Int. Conf. on Robotics and Automation (ICRA), 2015.

[C75] 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.), , 2015.

[C76] R. Mecca, E. Rodola and D. Cremers, 
Analysis of Surface Parametrizations for Modern Photometric Stereo Modeling, 
International Conference on Quality Control by Artificial Vision (QCAV), 2015.

[C77] F. Bergamasco, A. Albarelli, L. Cosmo, A. Torsello, E. Rodola and D. Cremers, 
Adopting an Unconstrained Ray Model in Light-field Cameras for 3D Shape Reconstruction, 
2015.
[C78] D. Mund, R. Triebel and D. Cremers,
Active Online Confidence Boosting for Efficient Object Classification,

q-Space Deep Learning for Twelve-Fold Shorter and Model-Free Diffusion MRI Scans,
Munich, Germany, October 2015.

[C80] A. Dosovitskiy, P. Fischer, E. Ilg, P. Haeusser, C. Hazirbas, V. Golkov, P. van der Smagt, D. Cremers and T. Brox,
*FlowNet: Learning Optical Flow with Convolutional Networks*,
December 2015.

*SPENCER: A Socially Aware Service Robot for Passenger Guidance and Help in Busy Airports*,

[C82] J. Engel, J. Stueckler and D. Cremers,
Large-Scale Direct SLAM with Stereo Cameras,
2015.

[C83] D. Caruso, J. Engel and D. Cremers,
Large-Scale Direct SLAM for Omnidirectional Cameras,
2015.

[C84] Y. Tao, R. Triebel and D. Cremers,
Semi-supervised Online Learning for Efficient Classification of Objects in 3D Data Streams,
2015.

[C85] R. Maier, J. Stueckler and D. Cremers,
Super-Resolution Keyframe Fusion for 3D Modeling with High-Quality Textures,

[C86] V. Usenko, J. Engel, J. Stueckler and D. Cremers,
Reconstructing Street-Scenes in Real-Time From a Driving Car,

[C87] M. Jaimez, M. Souiai, J. Stueckler, J. Gonzalez-Jimenez and D. Cremers,
Motion Cooperation: Smooth Piece-Wise Rigid Scene Flow from RGB-D Images,

[C88] E. Rodola, M. Moeller and D. Cremers,
Point-wise Map Recovery and Refinement from Functional Correspondence,
Aachen, Germany, 2015, Received the Best Paper Award.
[C89] C. Kerl, J. Stueckler and D. Cremers,
Dense Continuous-Time Tracking and Mapping with Rolling Shutter RGB-D Cameras,
Santiago, Chile, 2015.

[C90] M. Souiai, M. R. Oswald, Y. Kee, J. Kim, M. Pollefeys and D. Cremers,
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Santiago, Chile, 2015.

[C91] F. Stark, C. Hazirbas, R. Triebel and D. Cremers,
CAPTCHA Recognition with Active Deep Learning,
GCPR Workshop on New Challenges in Neural Computation, Aachen, Germany, 2015.

Model-Based Tracking at 300Hz using Raw Time-of-Flight Observations,
Santiago, Chile, 2015.

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<table>
<thead>
<tr>
<th>Index</th>
<th>Authors</th>
<th>Title</th>
<th>Conference</th>
<th>Year</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>C194</td>
<td>F. R. Schmidt and D. Cremers</td>
<td><strong>A Closed-Form Solution for Image Sequence Segmentation with Dynamical Shape Priors</strong></td>
<td>Jena, Germany, September</td>
<td>2009</td>
<td></td>
</tr>
<tr>
<td>C195</td>
<td>F. R. Schmidt, E. Toepppe and D. Cremers</td>
<td><strong>Efficient Planar Graph Cuts with Applications in Computer Vision</strong></td>
<td>Miami, Florida, 351-356</td>
<td>2009</td>
<td>Received a CVPR Doctoral Spotlight Award</td>
</tr>
<tr>
<td>C196</td>
<td>T. Pock, A. Chambolle, H. Bischof and D. Cremers</td>
<td><strong>A Convex Relaxation Approach for Computing Minimal Partitions</strong></td>
<td>Miami, Florida</td>
<td>2009</td>
<td></td>
</tr>
<tr>
<td>C197</td>
<td>K. Kolev and D. Cremers</td>
<td><strong>Continuous Ratio Optimization via Convex Relaxation with Applications to Multiview 3D Reconstruction</strong></td>
<td>Miami, Florida</td>
<td>2009</td>
<td></td>
</tr>
<tr>
<td>C198</td>
<td>A. Wedel, C. Rabe, A. Meissner, U. Franke and D. Cremers</td>
<td><strong>Detection and Segmentation of Independently Moving Objects from Dense Scene Flow</strong></td>
<td>D. Cremers, Y. Boykov, A. Blake and F. R. Schmidt(Eds.), Vol. 5681</td>
<td>2009</td>
<td></td>
</tr>
<tr>
<td>C199</td>
<td>B. Goldluecke and D. Cremers</td>
<td><strong>A Superresolution Framework for High-Accuracy Multiview Reconstruction</strong></td>
<td>Jena, Germany</td>
<td>2009</td>
<td>Received DAGM Best Paper Award</td>
</tr>
<tr>
<td>C200</td>
<td>B. Goldluecke and D. Cremers</td>
<td><strong>Superresolution Texture Maps for Multiview Reconstruction</strong></td>
<td>Kyoto, Japan</td>
<td>2009</td>
<td></td>
</tr>
<tr>
<td>C201</td>
<td>A. Sellent, M. Eisemann, B. Goldluecke, T. Pock, D. Cremers and M. Magnor</td>
<td><strong>Variational Optical Flow from Alternate Exposure Images</strong></td>
<td></td>
<td>2009</td>
<td></td>
</tr>
<tr>
<td>C202</td>
<td>T. Pock, D. Cremers, H. Bischof and A. Chambolle</td>
<td><strong>An Algorithm for Minimizing the Piecewise Smooth Mumford-Shah Functional</strong></td>
<td>Kyoto, Japan</td>
<td>2009</td>
<td></td>
</tr>
<tr>
<td>C203</td>
<td>A. Wedel, D. Cremers, T. Pock and H. Bischof</td>
<td><strong>Structure- and Motion-adaptive Regularization for High Accuracy Optic Flow</strong></td>
<td>Kyoto, Japan</td>
<td>2009</td>
<td></td>
</tr>
<tr>
<td>C204</td>
<td>T. Schoenemann, F. Kahl and D. Cremers</td>
<td><strong>Curvature Regularity for Region-based Image Segmentation and Inpainting: A Linear Programming Relaxation</strong></td>
<td>Kyoto, Japan</td>
<td>2009</td>
<td></td>
</tr>
<tr>
<td>C205</td>
<td>T. Windheuser, T. Schoenemann and D. Cremers</td>
<td><strong>Beyond Connecting the Dots: A Polynomial-time Algorithm for Segmentation and Boundary Estimation with Imprecise User Input</strong></td>
<td>Kyoto, Japan</td>
<td>2009</td>
<td></td>
</tr>
</tbody>
</table>

25
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Region-based Pose Tracking,

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A probabilistic level set formulation for interactive organ segmentation,

28
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[C244] T. Schoenemann and D. Cremers, 

[C245] T. Brox, B. Rosenhahn, U. Kersting and D. Cremers, 

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