2021

Journal Articles

[J1] H. Bauermeister, E. Laude, T. Moellenhoff, M. Moeller and D. Cremers,
Lifting the convex conjugate in Lagrangian relaxations: A Tractable Approach for Continuous Markov Random Fields,

[J2] P. Müller, V. Golkov, V. Tomassini and D. Cremers,
Rotation-Equivariant Deep Learning for Diffusion MRI,

[J3] C Tomani, D Cremers and F Buettner,
Parameterized Temperature Scaling for Boosting the Expressive Power in Post-Hoc Uncertainty Calibration,

[J4] J. Chui, S. Klenk and D. Cremers,
Event-Based Feature Tracking in Continuous Time with Sliding Window Optimization,

[J5] M. Mozes, M. Schmitt, V. Golkov, H. Schütze and D. Cremers,
Scene Graph Generation for Better Image Captioning?,

Conference and Workshop Papers

[C1] B. Haefner, S. Green, A. Oursland, D. Andersen, M. Goesele, D. Cremers, R. Newcombe and T. Whelan,
Recovering Real-world Reflectance Properties and Shading from HDR Imagery,

[C2] T Frerix, D Kochkov, J Smith, D Cremers, M Brenner and S Hoyer,
Variational Data Assimilation with a Learned Inverse Observation Operator,

[C3] M. Eisenberger, D. Novotny, G. Kerchenbaum, P. Labatut, N. Neverova, D. Cremers and A. Vedaldi,
NeuroMorph: Unsupervised Shape Interpolation and Correspondence in One Go,

[C4] M. C. Mukkamala, F. Westerkamp, E. Laude, D. Cremers and P. Ochs,
Bregman Proximal Gradient Algorithms for Deep Matrix Factorization,
Elmoatanz, Abderrahim, Fadili, Jalal, Quéau, Yvain, Rabin, Julien, Simon and Loïc(Eds.),


Author: Cremers

List of Publications

[C16] C Tomani, S Gruber, ME Erdem, D Cremers and F Buettner,
Post-hoc Uncertainty Calibration for Domain Drift Scenarios,

[C17] N Demmel, D Schubert, C Sommer, D Cremers and V Usenko,
Square Root Marginalization for Sliding-Window Bundle Adjustment,
IEEE International Conference on Computer Vision (ICCV), 2021.

[C18] MW Wudenka, MG Müller, N Demmel, A Wedler, R Triebel, D Cremers and W Stuerzl,
Towards Robust Monocular Visual Odometry for Flying Robots on Planetary Missions,

[C19] S Klenk, J Chui, N Demmel and D Cremers,
TUM-VIE: The TUM Stereo Visual-Inertial Event Dataset,

[C20] L Koenstler, N Yang, N Zeller and D Cremers,
TANDEM: Tracking and Dense Mapping in Real-time using Deep Multi-view Stereo,
Conference on Robot Learning (CoRL), 2021.

[C21] S Weber, N Demmel and D Cremers,
Multidirectional Conjugate Gradients for Scalable Bundle Adjustment,
German Conference on Pattern Recognition (GCPR), 2021, Oral Presentation.

2020

Journal Articles

[J1] E. Laude, P. Ochs and D. Cremers,
Bregman Proximal Mappings and Bregman-Moreau Envelopes under Relative Prox-Regularity,

[J2] B. Haefner, S. Peng, A. Verma, Y. Queau and D. Cremers,
Photometric Depth Super-Resolution,

[J3] V. Golkov, A. Becker, D. T. Plop, D. 38;268uturilo, N. Davoudi, J. Mendenhall, R. Moretti, J. Meiler and D. Cremers,
Deep Learning for Virtual Screening: Five Reasons to Use ROC Cost Functions,

Visual-Inertial Mapping with Non-Linear Factor Recovery,

[J5] L. von Stumberg, P. Wenzel, Q. Khan and D. Cremers,
GN-Net: The Gauss-Newton Loss for Multi-Weather Relocalization,
Author: Cremers

List of Publications

[J6] C. Sommer, Y. Sun, L. J. Guibas, D. Cremers and T. Birdal,
From Planes to Corners: Multi-Purpose Primitive Detection in Unorganized
3D Point Clouds,
IEEE Robotics and Automation Letters (RA-L) 38; International Conference on Robotics

Sijbers and M. Verhoye,
Accelerating in vivo fast spin echo high angular resolution diffusion imaging
with an isotropic resolution in mice through compressed sensing,

[J8] G Fabbro, V Golkov, T Kemp and D Cremers,
Speech Synthesis and Control Using Differentiable DSP,

[J9] I Chiotellis and D Cremers,
Neural Online Graph Exploration,

Conference and Workshop Papers

Meiler and D. Cremers,
3D Deep Learning for Biological Function Prediction from Physical Fields,

[C2] L. Sang, B. Haefner and D. Cremers,
Inferring Super-Resolution Depth from a Moving Light-Source Enhanced
RGB-D Sensor: A Variational Approach,
IEEE Winter Conference on Applications of Computer Vision (WACV), Colorado, USA,
March 2020, Spotlight Presentation.

[C3] T Frerix, M Niesner and D Cremers,
Homogeneous Linear Inequality Constraints for Neural Network Activations,
Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition

[C4] R. Wang, N. Yang, J. Stueckler and D. Cremers,
DirectShape: Photometric Alignment of Shape Priors for Visual Vehicle Pose
and Shape Estimation,

[C5] M. Eisenberger, Z. Lähner and D. Cremers,
Smooth Shells: Multi-Scale Shape Registration with Functional Maps,
IEEE International Conference on Computer Vision and Pattern Recognition (CVPR),
2020, Oral Presentation.

[C6] M. Eisenberger and D. Cremers,
Hamiltonian Dynamics for Real-World Shape Interpolation,
European Conference on Computer Vision (ECCV), 2020, Spotlight Presentation.
M. Eisenberger, A. Toker, L. Leal-Taixe and D. Cremers,
Deep Shells: Unsupervised Shape Correspondence with Optimal Transport,

S. Weiss, R. Maier, D. Cremers, R. Westermann and N. Thuerey,
Correspondence-Free Material Reconstruction using Sparse Surface Constraints,

C. Sommer, V. Usenko, D. Schubert, N. Demmel and D. Cremers,
Efficient Derivative Computation for Cumulative B-Splines on Lie Groups,

N. Yang, L. von Stumberg, R. Wang and D. Cremers,
D3VO: Deep Depth, Deep Pose and Deep Uncertainty for Monocular Visual Odometry,

Z. Ye, T. Möllenhoff, T. Wu and D. Cremers,
Optimization of Graph Total Variation via Active-Set-based Combinatorial Reconditioning,
International Conference on Artificial Intelligence and Statistics (AISTATS), 2020.

J Liu, I Chiotellis, R Triebel and D Cremers,
Effective Version Space Reduction for Convolutional Neural Networks,
European Conference on Machine Learning and Data Mining (ECML-PKDD), 2020.

J. Du, R. Wang and D. Cremers,
DH3D: Deep Hierarchical 3D Descriptors for Robust Large-Scale 6DoF Relocalization,
European Conference on Computer Vision (ECCV), 2020, Spotlight Presentation.

C. Sommer, Y. Sun, E. Bylow and D. Cremers,
PrimiTect: Fast Continuous Hough Voting for Primitive Detection,

L. Koestler, N. Yang, R. Wang and D. Cremers,
Learning Monocular 3D Vehicle Detection without 3D Bounding Box Labels,

P. Wenzel, R. Wang, N. Yang, Q. Cheng, Q. Khan, L. von Stumberg, N. Zeller and D.
Cremers,
4Seasons: A Cross-Season Dataset for Multi-Weather SLAM in Autonomous Driving,

B Holzschuh, Z Lähner and D Cremers,
Simulated Annealing for 3D Shape Correspondence,
Author: Cremers

List of Publications

[C18] M Aygün, Z Lähner and D Cremers,
Unsupervised Dense Shape Correspondence using Heat Kernels,

[C19] N Demmel, M Gao, E Laude, T Wu and D Cremers,
Distributed Photometric Bundle Adjustment,

[C20] L. von Stumberg, P. Wenzel, N. Yang and D. Cremers,
LM-Reloc: Levenberg-Marquardt Based Direct Visual Relocalization,

2019

Journal Articles

Video Object Segmentation without Temporal Information,

[J2] H Tjaden, U Schwanecke, E Schömer and D Cremers,
A Region-based Gauss-Newton Approach to Real-Time Monocular Multiple Object Tracking,

A Non-invasive 3D Body Scanner and Software Tool towards Analysis of Scoliosis,

[J4] F. Pasa, V. Golkov, F. Pfeiffer, D. Cremers and D. Pfeiffer,
Efficient Deep Network Architectures for Fast Chest X-Ray Tuberculosis Screening and Visualization,

[J5] J. Schuchardt, V. Golkov and D. Cremers,
Learning to Evolve,

[J6] L. Della Libera, V. Golkov, Y. Zhu, A. Mielke and D. Cremers,
Deep Learning for 2D and 3D Rotatable Data: An Overview of Methods,

Conference and Workshop Papers

Shape Correspondence with Isometric and Non-Isometric Deformations,
Silvia Biasotti, Guillaume Lavoué and Remco C. Veltkamp(Eds.), 12th Eurographics Workshop on 3D Object Retrieval, 3DOR@Eurographics 2019, Genoa, Italy, May 5-6, 2019, Eurographics Association, 111-119, 2019.
Author: Cremers

List of Publications

[C2] B. Haefner, Y. Queau and D. Cremers,
Photometric Segmentation: Simultaneous Photometric Stereo and Masking,
*International Conference on 3D Vision (3DV)*, Quebec City, Canada, September 2019, Spotlight Presentation.

[C3] B. Haefner, Z. Ye, M. Gao, T. Wu, Y. Queau and D. Cremers,
Variational Uncalibrated Photometric Stereo under General Lighting,
*International Conference on Computer Vision (ICCV)*, Seoul, South Korea, October 2019.

[C4] A. Vasilev, V. Golkov, M. Meissner, I. Lipp, E. Sgarlata, V. Tomassini, D. K. Jones and D. Cremers,
q-Space Novelty Detection with Variational Autoencoders,
*MICCAI 2019 International Workshop on Computational Diffusion MRI*, 2019, Oral Presentation.

[C5] P. Swazinna, V. Golkov, I. Lipp, E. Sgarlata, V. Tomassini, D. K. Jones and D. Cremers,
Negative-Unlabeled Learning for Diffusion MRI,

[C6] D. Schubert, N. Demmel, L. von Stumberg, V. Usenko and D. Cremers,
Rolling-Shutter Modelling for Visual-Inertial Odometry,

[C7] M. Eisenberger, Z. Lähner and D. Cremers,
Divergence-Free Shape Correspondence by Deformation,

[C8] E. Laude, T. Wu and D. Cremers,
Optimization of Inf-Convolution Regularized Nonconvex Composite Problems,
*International Conference on Artificial Intelligence and Statistics (AISTATS)*, 2019.

[C9] T. Möllenhoff and D. Cremers,
Lifting Vectorial Variational Problems: A Natural Formulation based on Geometric Measure Theory and Discrete Exterior Calculus,
*IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2019, Oral Presentation.

[C10] T. Möllenhoff and D. Cremers,
Flat Metric Minimization with Applications in Generative Modeling,

[C11] Q. Khan, P. Wenzel, D. Cremers and L. Leal-Taixe,
Towards Generalizing Sensorimotor Control Across Weather Conditions,

[C12] M. Moeller, T. Möllenhoff and D. Cremers,
Controlling Neural Networks via Energy Dissipation,
*International Conference on Computer Vision (ICCV)*, Seoul, South Korea, 10 2019.

[C13] E. Jung, N. Yang and D. Cremers,
Multi-Frame GAN: Image Enhancement for Stereo Visual Odometry in Low Light,
*Conference on Robot Learning (CoRL)*, 2019, Full Oral Presentation.
Author: Cremers

List of Publications


2018

Journal Articles


List of Publications

[J10] L. Ma, J. Stueckler, T. Wu and D. Cremers, 
Detailed Dense Inference with Convolutional Neural Networks via Discrete Wavelet Transform, 
Aug 2018.

Conference and Workshop Papers

[C1] R. Henschel, L. Leal-Taixe, D. Cremers and B. Rosenhahn, 
Fusion of Head and Full-Body Detectors for Multi-Object Tracking, 

[C2] C. Sommer and D. Cremers, 
Joint Representation of Primitive and Non-primitive Objects for 3D Vision, 

[C3] C. Hazirbas, S. G. Soyer, M. C. Staab, L. Leal-Taixe and D. Cremers, 
Deep Depth From Focus, 
Asian Conference on Computer Vision (ACCV), December 2018.

[C4] B. Haefner, Y. Queau, T. Möllenhoff and D. Cremers, 
Fight ill-posedness with ill-posedness: Single-shot variational depth super-resolution from shading, 

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

[C6] C Domokos, FR. Schmidt and D Cremers, 
MRF Optimization with Separable Convex Prior on Partially Ordered Labels, 

[C7] E. Laude, T. Wu and D. Cremers, 
A Nonconvex Proximal Splitting Algorithm under Moreau-Yosida Regularization, 
International Conference on Artificial Intelligence and Statistics (AISTATS), 2018.

[C8] 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.

[C9] R Scona, M Jaimez, YR. Petillot, M Fallon and D Cremers, 
StaticFusion: Background Reconstruction for Dense RGB-D SLAM in Dynamic Environments, 
q-Space Novelty Detection in Short Diffusion MRI Scans of Multiple Sclerosis, 

q-Space Deep Learning for Alzheimer’s Disease Diagnosis: Global Prediction and Weakly-Supervised Localization, 

[C12] B. T. Do, V. Golkov, G. E. Gürel and D. Cremers, 
Precursor microRNA Identification Using Deep Convolutional Neural Networks, 

[C13] 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.

[C14] T. Frerix, T. Möllenhoff, M. Moeller and D. Cremers, 
Proximal Backpropagation, 

[C15] L. von Stumberg, V. Usenko and D. Cremers, 
Direct Sparse Visual-Inertial Odometry using Dynamic Marginalization, 

[C16] D. Schubert, T. Goll, N. Demmel, V. Usenko, J. Stueckler and D. Cremers, 
The TUM VI Benchmark for Evaluating Visual-Inertial Odometry, 

[C17] X. Gao, R. Wang, N. Demmel and D. Cremers, 
LDSO: Direct Sparse Odometry with Loop Closure, 

[C18] Z. Lähner, D. Cremers and T. Tung, 
DeepWrinkles: Accurate and Realistic Clothing Modeling, 

[C19] N. Yang, R. Wang, J. Stueckler and D. Cremers, 
Deep Virtual Stereo Odometry: Leveraging Deep Depth Prediction for Monocular Direct Sparse Odometry, 

[C20] D. Schubert, N. Demmel, V. Usenko, J. Stueckler and D. Cremers, 
Direct Sparse Odometry With Rolling Shutter, 
Author: Cremers  

List of Publications

[C21] V. Usenko, N. Demmel and D. Cremers,  
**The Double Sphere Camera Model,**  

[C22] I. Chiotellis, F. Zimmermann, D. Cremers and R. Triebel,  
**Incremental Semi-Supervised Learning from Streams for Object Classification,**  

[C23] 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.**

[C24] P. Wenzel, Q. Khan, D. Cremers and L. Leal-Taixe,  
**Modular Vehicle Control for Transferring Semantic Information Between Weather Conditions Using GANs,**  
*Conference on Robot Learning (CoRL)*, 2018.

2017

Journal Articles

[J1] G. Kuschk, P. d’Angelo, D. Gaudrie, P. Reinartz and D. Cremers,  
**Spatially Regularized Fusion of Multiresolution Digital Surface Models,**  

[J2] D. Cremers, L. Leal-Taixe and R. Vidal,  
**Deep Learning for Computer Vision (Dagstuhl Seminar 17391),**  

[J3] Y. Kee, Y. Lee, M. Souiiai, D. Cremers and J. Kim,  
**Sequential Convex Programming for Computing Information-Theoretic Minimal Partitions: Nonconvex Nonsmooth Optimization,**  

[J4] D. Cremers,  
**Computer Vision für 3-D-Rekonstruktion - Vom Nischenthema zum Mainstream,**  

[J5] E. Rodola, L. Cosmo, M. M. Bronstein, A. Torsello and D. Cremers,  
**Partial Functional Correspondence,**  

[J6] L. Cosmo, E. Rodola, A. Albarelli, F. Memoli and D. Cremers,  
**Consistent Partial Matching of Shape Collections via Sparse Modeling,**  

**Genetic defects in s-spectrin and tau sensitize C. elegans axons to movement-induced damage via torque-tension coupling,**  
*Tau Like Proteins Reduce Torque Generation in Microtubule Bundles*, 

[J9] E Rodola, M Möller and D Cremers, 
*Regularized Pointwise Map Recovery from Functional Correspondence*, 

[J10] J. Kukacka, V. Golkov and D. Cremers, 
*Regularization for Deep Learning: A Taxonomy*, 

Conference and Workshop Papers

[C1] M. Benning, M. Möller, R. Z. Nossek, M. Burger, D. Cremers and G. Gilboa, 
*Nonlinear Spectral Image Fusion*, 

[C2] D. Bender, W. Koch and D. Cremers, 
*Map-based drone homing using shortcuts*, 

[C3] G. Kuschk, A. Bozic and D. Cremers, 
*Real-time variational stereo reconstruction with applications to large-scale dense SLAM*, 

[C4] 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.

[C5] 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*, 

[C6] L. Ma, J. Stueckler, C. Kerl and D. Cremers, 
*Multi-View Deep Learning for Consistent Semantic Mapping with RGB-D Cameras*, 

[C7] M. Vestner, R. Litman, E. Rodola, A. Bronstein and D. Cremers, 
*Product Manifold Filter: Non-Rigid Shape Correspondence via Kernel Density Estimation in the Product Space*, 


[C19] Y. Queau, J. Melou, J.-D. Durou and D. Cremers, 
Dense Multi-view 3D-reconstruction Without Dense Correspondences, 

[C20] P. Haeusser, T. Frerix, A. Mordvintsev and D. Cremers, 
Associative Domain Adaptation, 

[C21] Y. Queau, M. Pizenberg, D. Cremers and J.-D. Durou, 
Stereophotometrie microscopique sans demosaïquage, 
GRETSI, Juan-les-Pins, USA, 2017.

Efficient Deformable Shape Correspondence via Kernel Matching, 
International Conference on 3D Vision (3DV), Qingdao, China, October 2017, Oral Presentation.

[C23] R. Maier, R. Schaller and D. Cremers, 
Efficient Online Surface Correction for Real-time Large-Scale 3D Reconstruction, 
British Machine Vision Conference (BMVC), London, United Kingdom, September 2017.

[C24] J. Geiping, H. Dirks and D. Cremers, 
Multiframe Motion Coupling for Video Super Resolution, 

[C25] R. Maier, K. Kim, D. Cremers, J. Kautz and M. Niessner, 
Intrinsic3D: High-Quality 3D Reconstruction by Joint Appearance and Geometry Optimization with Spatially-Varying Lighting, 
International Conference on Computer Vision (ICCV), Venice, Italy, October 2017.

[C26] S. Peng, B. Haefner, Y. Queau and D. Cremers, 
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.

[C27] R. Wang, M. Schwörer and D. Cremers, 
Stereo DSO: Large-Scale Direct Sparse Visual Odometry with Stereo Cameras, 
International Conference on Computer Vision (ICCV), Venice, Italy, October 2017.

[C28] T. Möllenhoff and D. Cremers, 
Sublabel-Accurate Discretization of Nonconvex Free-Discontinuity Problems, 
International Conference on Computer Vision (ICCV), Venice, Italy, October 2017.

[C29] Y. Queau, J. Melou, F. Castan, D. Cremers and J.-D. Durou, 
A Variational Approach to Shape-from-shading Under Natural Illumination, 
Author: Cremers

List of Publications

[C30] F. Bernard, F. R. Schmidt, J. Thunberg and D. Cremers,
A Combinatorial Solution to Non-Rigid 3D Shape-to-Image Matching,

2016
Journal Articles

[J1] J. Diebold, C. Nieuwenhuis and D. Cremers,
Midrange Geometric Interactions for Semantic Segmentation,

[J2] J. Duran, M. Möller, C. Sbert and D. Cremers,
Collaborative Total Variation: A General Framework for Vectorial TV Models,

[J3] M. Burger, G. Gilboa, M. Möller, L. Eckardt and D. Cremers,
Spectral Decompositions Using One-Homogeneous Functionals,

Anisotropic Diffusion Descriptors,

[J5] V. Golkov, A. Dosovitskiy, J. I. Sperl, M. I. Menzel, M. Czisch, P. Sämann, T. Brox and D. Cremers,
q-Space Deep Learning: Twelve-Fold Shorter and Model-Free Diffusion MRI Scans,
IEEE Transactions on Medical Imaging, 35: 2016, Special Issue on Deep Learning.

[J6] O. Litany, E. Rodola, A. M. Bronstein, M. M. Bronstein and D. Cremers,
Non-Rigid Puzzles,

[J7] M. Vestner, R. Litman, A. Bronstein, E. Rodola and D. Cremers,
Bayesian Inference of Bijective Non-Rigid Shape Correspondence,

Book Chapters

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

Conference and Workshop Papers

[C1] L. Cosmo, A. Albarelli, F. Bergamasco, A. Torsello, E. Rodola and D. Cremers,
A game-theoretical approach for joint matching of multiple feature throughout unordered images,
[C2] N. Mayer, E. Ilg, P. Häusser, P. Fischer, D. Cremers, A. Dosovitskiy and T. Brox,
A Large Dataset to Train Convolutional Networks for Disparity, Optical Flow, and Scene Flow Estimation,

[C3] 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, apr 2016.

[C4] 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,
Annual Conference on Neural Information Processing Systems (NIPS), Barcelona, Spain, dec 2016, Oral Presentation (acceptance rate: under 2%).

[C5] Z. Lähner, E. Rodola, F. R. Schmidt, M. M. Bronstein and D. Cremers,
Efficient Globally Optimal 2D-to-3D Deformable Shape Matching,
IEEE Conference on Computer Vision and Pattern Recognition (CVPR), May 2016.

[C6] V. Usenko, J. Engel, J. Stueckler and D. Cremers,
Direct Visual-Inertial Odometry with Stereo Cameras,
International Conference on Robotics and Automation (ICRA), May 2016.

[C7] A. Narr, R. Triebel and D. Cremers,
Stream-based Active Learning for Efficient and Adaptive Classification of 3D Objects,
International Conference on Robotics and Automation (ICRA), May 2016.

SHREC’16: Matching of Deformable Shapes with Topological Noise,
Proc. of Eurographics Workshop on 3D Object Retrieval (3DOR), May 2016.

SHREC’16: Partial Matching of Deformable Shapes,
Proc. of Eurographics Workshop on 3D Object Retrieval (3DOR), May 2016.

[C10] T. Möllenhoff, E. Laude, M. Moeller, J. Lellmann and D. Cremers,
Sublabel-Accurate Relaxation of Nonconvex Energies,
IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2016, Oral Presentation, Received the Best Paper Honorable Mention Award at CVPR 2016.

[C11] L. Ma, C. Kerl, J. Stueckler and D. Cremers,
CPA-SLAM: Consistent Plane-Model Alignment for Direct RGB-D SLAM,
International Conference on Robotics and Automation (ICRA), May 2016.

[C12] J. Engel, V. Usenko and D. Cremers,
A Photometrically Calibrated Benchmark For Monocular Visual Odometry,

[C13] J. Engel, V. Koltun and D. Cremers,
Direct Sparse Odometry,


2015
Journal Articles


[J6] T. Möllenhoff, E. Strekalovskiy, M. Möller and D. Cremers,
The Primal-Dual Hybrid Gradient Method for Semiconvex Splittings,

[J7] Y. Kee, H. Lee, J. Yim, D. Cremers and J. Kim,
Entropy Minimization for Groupwise Planar Shape Co-alignment and its Applications,

[J8] M. Möller, M. Benning, C. Schönlieb and D. Cremers,
Variational Depth From Focus Reconstruction,

Book Chapters

[BC1] D. Cremers,
Image Segmentation with Shape Priors: Explicit Versus Implicit Representations,

[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, oct 2015, Book Chapter, and Oral Presentation at MICCAI 2015 Workshop on Computational Diffusion MRI.

Conference and Workshop Papers

[C1] M. Moeller, J. Diebold, G. Gilboa and D. Cremers,
Learning Nonlinear Spectral Filters for Color Image Reconstruction,
IEEE International Conference on Computer Vision (ICCV), 2015.

[C2] J. Diebold, N. Demmel, C. Hazirbas, M. Möller and D. Cremers,
Interactive Multi-label Segmentation of RGB-D Images,
Scale Space and Variational Methods in Computer Vision (SSVM), june 2015.

[C3] 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), june 2015, Oral Presentation.

[C4] T. Möllenhoff, E. Strekalovskiy, M. Möller and D. Cremers,
Low Rank Priors for Color Image Regularization,

[C5] 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.
[C6] J. Stühmer and D. Cremers,
A Fast Projection Method for Connectivity Constraints in Image Segmentation,

[C7] 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.

[C8] 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,
IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2015.

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[C11] A. Dosovitskiy, P. Fischer, E. Ilg, P. Haeusser, C. Hazirbas, V. Golkov, P. van der Smagt, D. Cremers and T. Brox,
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[C14] D. Caruso, J. Engel and D. Cremers,
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[C15] Y. Tao, R. Triebel and D. Cremers,
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[C16] R. Maier, J. Stueckler and D. Cremers, 
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[C17] V. Usenko, J. Engel, J. Stueckler and D. Cremers, 
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[C18] M. Jaimez, M. Souiai, J. Stueckler, J. Gonzalez-Jimenez and D. Cremers, 
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[C19] E. Rodola, M. Moeller and D. Cremers, 
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[C20] C. Kerl, J. Stueckler and D. Cremers, 
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[C24] J. Duran, M. Moeller, C. Sbert and D. Cremers, 
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[J2] E. Strekalovskiy, A. Chambolle and D. Cremers, 
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[J3] J. Engel, J. Sturm and D. Cremers, 
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[J4] E. Rodola, S. R Bulo and D. Cremers, 
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[C4] F. Steinbruecker, J. Sturm and D. Cremers, 
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[C8] J. Engel, T. Schöps and D. Cremers,
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[C9] T. Schöps, J. Engel and D. Cremers,
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