2023
Conference and Workshop Papers
[C1] F Hofherr, L Koestler, F Bernard and D Cremers,
Neural Implicit Representations for Physical Parameter Inference from a Single Video,

[C2] L Sang, B Haefner, X Zuo and D Cremers,
High-Quality RGB-D Reconstruction via Multi-View Uncalibrated Photometric Stereo and Gradient-SDF,
IEEE Winter Conference on Applications of Computer Vision (WACV), Hawaii, USA, January 2023.

2022
Journal Articles
[J1] C Tomani and D Cremers,
Challenger: Training with Attribution Maps,

[J2] L. von Stumberg and D. Cremers,
DM-VIO: Delayed Marginalization Visual-Inertial Odometry,

and R. Kienberger,
Deep Learning in Attosecond Metrology,
Optics Express, 30(9): 15669-15684, 2022, Editor’s Pick.

[J4] T Yenamandra, A Tewari, N Yang, F Bernard, C Theobalt and D Cremers,
HDSDF: Hybrid Directional and Signed Distance Functions for Fast Inverse Rendering,
2022.

Conference and Workshop Papers
[C1] M. Eisenberger, A. Toker, L. Leal-Taixe, F. Bernard and D. Cremers,
A Unified Framework for Implicit Sinkhorn Differentiation,
IEEE International Conference on Computer Vision and Pattern Recognition (CVPR), 2022.

[C2] C Tomani, D Cremers and F Buettner,
Parameterized Temperature Scaling for Boosting the Expressive Power in Post-Hoc Uncertainty Calibration,
European Conference on Computer Vision (ECCV), 2022.

[C3] J. Veraart and 100 coauthors,
A data-driven variability assessment of brain diffusion MRI preprocessing pipelines,
[C4] C Sommer, L Sang, D Schubert and D Cremers, 
Gradient-SDF: A Semi-Implicit Surface Representation for 3D Reconstruction, 
IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2022.

[C5] Z Ye, T Yenamandra, F Bernard and D Cremers, 
Joint Deep Multi-Graph Matching and 3D Geometry Learning from Inhomogeneous 2D Image Collections, 
AAAI, 2022.

[C6] D Muhle, L Koestler, N Demmel, F Bernard and D Cremers, 
The Probabilistic Normal Epipolar Constraint for Frame-To-Frame Rotation Optimization under Uncertain Feature Positions, 
IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2022.

[C7] S Weber, N Demmel, T Chon Chan and D Cremers, 
Power Bundle Adjustment for Large-Scale 3D Reconstruction, submission, 2022.

[C8] F Müller, Q Khan and D Cremers, 
Lateral Ego-Vehicle Control Without Supervision Using Point Clouds, 

[C9] L Hang, Q Khan, V Tresp and D Cremers, 
Biologically Inspired Neural Path Finding, 
Brain Informatics (Accepted), Springer, 2022.

[C10] D Das, Q Khan and D Cremers, 
Ventriloquist-Net: Leveraging Speech Cues for Emotive Talking Head Generation, 
IEEE International Conference on Image Processing (Accepted), 2022.

[C11] L Koestler, D Grittner, M Moeller, D Cremers and Z Lähner, 
Intrinsic Neural Fields: Learning Functions on Manifolds, 
European Conference on Computer Vision (ECCV), 2022.

[C12] M Gladkova, N Korobov, N Demmel, A Osep, L Leal-Taixe and D Cremers, 
DirectTracker: 3D Multi-Object Tracking Using Direct Image Alignment and Photometric Bundle Adjustment, 

[C13] HHH Hsu, Y Shen, C Tomani and D Cremers, 
What Makes Graph Neural Networks Miscalibrated?, 

[C14] Y Shen and D Cremers, 
Deep Combinatorial Aggregation, 

[C15] HHH Hsu, Y Shen and D Cremers, 
A Graph Is More Than Its Nodes: Towards Structured Uncertainty-Aware Learning on Graphs, 
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] J. Chui, S. Klenk and D. Cremers,  
*Event-Based Feature Tracking in Continuous Time with Sliding Window Optimization*,  

[J4] 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. Ouraland, 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*,  
*IEEE International Conference on Computer Vision and Pattern Recognition (CVPR)*, 2021.

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

[C5] Z. Ye, B. Haefner, Y. Queau, T. Möllenhoff and D. Cremers,  
*Sublabel-Accurate Multilabeling Meets Product Label Spaces*,  
*German Conference on Pattern Recognition (GCPR)*, 2021.

[C6] F. Wimbauer, N. Yang, L. von Stumberg, N. Zeller and D Cremers,  
*MonoRec: Semi-Supervised Dense Reconstruction in Dynamic Environments from a Single Moving Camera*,  
*IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2021.


**2020**

**Journal Articles**


Conference and Workshop Papers


2019

Journal Articles


Conference and Workshop Papers


2018
Journal Articles

[J1] J. Engel, V. Koltun and D. Cremers,
Direct Sparse Odometry,

[J2] N. Yang, R. Wang, X. Gao and D. Cremers,
Challenges in Monocular Visual Odometry: Photometric Calibration, Motion Bias and Rolling Shutter Effect,

[J3] Y. Queau, B. Durix, T. Wu, D. Cremers, F. Lauze and J.-D. Durou,
LED-based Photometric Stereo: Modeling, Calibration and Numerical Solution,

[J4] B Bringmann, D Cremers and F Krahmer,
The homotopy method revisited: Computing solution paths of L1-regularized problems,

[J5] J. Melou, Y. Queau, J.-D. Durou, F. Castan and D. Cremers,
Variational Reflectance Estimation from Multi-view Images,

[J6] P. Bergmann, R. Wang and D. Cremers,
Online Photometric Calibration of Auto Exposure Video for Realtime Visual Odometry and SLAM,

[J7] E. Aljalbout, V. Golkov, Y. Siddiqui, M. Strobel and D. Cremers,
Clustering with Deep Learning: Taxonomy and New Methods,

[J8] N Mayer, E Ilg, P Fischer, C Hazirbas, D Cremers, A Dosovitskiy and T Brox,
What Makes Good Synthetic Training Data for Learning Disparity and Optical Flow Estimation?,

Omnidirectional DSO: Direct Sparse Odometry with Fisheye Cameras,

[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


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, 
International Conference on Robotics and Automation (ICRA), May 2018.

[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, 
European Conference on Computer Vision (ECCV), September 2018, Oral Presentation.

[C19] N. Yang, R. Wang, J. Stueckler and D. Cremers, 
Deep Virtual Stereo Odometry: Leveraging Deep Depth Prediction for Monocular Direct Sparse Odometry, 
European Conference on Computer Vision (ECCV), September 2018, Oral Presentation.

[C20] D. Schubert, N. Demmel, V. Usenko, J. Stueckler and D. Cremers, 
Direct Sparse Odometry With Rolling Shutter, 
European Conference on Computer Vision (ECCV), September 2018, Oral Presentation.

[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), 
Dagstuhl Reports, 7(9): 109-125, 2017.

[J3] Y. Kee, Y. Lee, M. Souiai, 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, 
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,  

[C2] D. Bender, W. Koch and D. Cremers,  

[C3] G. Kuschk, A. Bozic and D. Cremers,  
*Real-time variational stereo reconstruction with applications to large-scale dense SLAM*, *IEEE Intelligent Vehicles Symposium, IV 2017, Los Angeles, CA, USA, June 11-14, 2017*, IEEE, 1348-1355, 2017.

[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,  

[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*,  

[C8] M. Dzitsiuk, J. Sturm, R. Maier, L. Ma and D. Cremers,  
*De-noising, Stabilizing and Completing 3D Reconstructions On-the-go using Plane Priors*,  

[C9] L. von Stumberg, V. Usenko, J. Engel, J. Stueckler and D. Cremers,  


[C21] Y. Queau, M. Pizenberg, D. Cremers and J.-D. Durou,
Stereophotometrie microscopique sans demosaixage,
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,

[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


Book Chapters


Conference and Workshop Papers


[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*, 

[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*, 

[C7] A. Narr, R. Triebel and D. Cremers, 
*Stream-based Active Learning for Efficient and Adaptive Classification of 3D Objects*, 

*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*, 

[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*, 

[C14] E. Laude, T. Möllenhoff, M. Moeller, J. Lellmann and D. Cremers, 
*Sublabel-Accurate Convex Relaxation of Vectorial Multilabel Energies*, 
*European Conference on Computer Vision (ECCV)*, October 2016.
[C15] D. Bender, D. Cremers and W. Koch,
A position free boresight calibration for INS-camera systems,

[C16] I. Chiotellis, R. Triebel, T. Windheuser and D. Cremers,
Non-Rigid 3D Shape Retrieval via Large Margin Nearest Neighbor Embedding,
European Conference on Computer Vision (ECCV), October 2016.

[C17] T. Windheuser and D. Cremers,
A Convex Solution to Spatially-Regularized Correspondence Problems,
European Conference on Computer Vision (ECCV), October 2016.

[C18] S. Sharifzadeh, I. Chiotellis, R. Triebel and D. Cremers,
Learning to Drive using Inverse Reinforcement Learning and Deep Q-Networks,
NIPS Workshops, December 2016.

[C19] D. Bender, F. Rouatbi, M. Schikora, D. Cremers and W. Koch,
Scaling the world of monocular SLAM with INS-measurements for UAS navigation,

2015
Journal Articles

[J1] J. Diebold, S. Tari and D. Cremers,
The Role of Diffusion in Figure Hunt Games,

[J2] S. Madhogaria, P. M. Baggenstoss, M. Schikora, W. Koch and D. Cremers,
Car detection by fusion of HOG and causal MRF,

[J3] M. Klodt, K. Herzog, R. Töpfer and D. Cremers,
Field phenotyping of grapevine growth using dense stereo reconstruction,

[J4] E. Rodola, A. Albarelli, D. Cremers and A. Torsello,
A Simple and Effective Relevance-based Point Sampling for 3D Shapes,

[J5] R. Mecca, E. Rodola and D. Cremers,
Realistic Photometric Stereo Using Partial Differential Irradiance Equation Ratios,

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

List of Publications

[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 Modelling,*
*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.

[C9] 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,*

[C11] 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,*
*IEEE International Conference on Computer Vision (ICCV),* dec 2015.

*SPENCER: A Socially Aware Service Robot for Passenger Guidance and Help in Busy Airports,*
*Proc. Field and Service Robotics (FSR),* 2015.

[C13] J. Engel, J. Stueckler and D. Cremers,
*Large-Scale Direct SLAM with Stereo Cameras,*

[C14] D. Caruso, J. Engel and D. Cremers,
*Large-Scale Direct SLAM for Omnidirectional Cameras,*

[C15] Y. Tao, R. Triebel and D. Cremers,
*Semi-supervised Online Learning for Efficient Classification of Objects in 3D Data Streams,*

[C16] R. Maier, J. Stueckler and D. Cremers,
*Super-Resolution Keyframe Fusion for 3D Modeling with High-Quality Textures,*
V. Usenko, J. Engel, J. Stueckler and D. Cremers,
Reconstructing Street-Scenes in Real-Time From a Driving Car,

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

E. Rodola, M. Moeller and D. Cremers,
Point-wise Map Recovery and Refinement from Functional Correspondence,
Proceedings Vision, Modeling and Visualization (VMV), Aachen, Germany, 2015, Received the Best Paper Award.

C. Kerl, J. Stueckler and D. Cremers,
Dense Continuous-Time Tracking and Mapping with Rolling Shutter RGB-D Cameras,
IEEE International Conference on Computer Vision (ICCV), Santiago, Chile, 2015.

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.

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.

J. Stühmer, S. Nowozin, A. Fitzgibbon, R. Szeliski, T. Perry, S. Acharya, D. Cremers and J. Shotton,
Model-Based Tracking at 300Hz using Raw Time-of-Flight Observations,
IEEE International Conference on Computer Vision (ICCV), Santiago, Chile, 2015.

J. Duran, M. Moeller, C. Shert and D. Cremers,
A Novel Framework for Nonlocal Vectorial Total Variation Based on $\ell_p,q,r\mathring{\alpha}^n$ norms,

2014
Journal Articles

B. Goldluecke, M. Aubry, K. Kolev and D. Cremers,
A Super-resolution Framework for High-Accuracy Multiview Reconstruction,

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

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

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

Books

[B1] E. D. Cremers, I. Reid, H. Saito and M.-S. Yang,
*Computer Vision: ACCV 2014*,
Springer 2014.

Book Chapters

Joint Super-Resolution Using Only One Anisotropic Low-Resolution Image per q-Space Coordinate,

Conference and Workshop Papers

Direct Reconstruction of the Average Diffusion Propagator with Simultaneous Compressed-Sensing-Accelerated Diffusion Spectrum Imaging and Image Denoising by Means of Total Generalized Variation Regularization,

Semi-Joint Reconstruction for Diffusion MRI Denoising Imposing Similarity of Edges in Similar Diffusion-Weighted Images,

Improved Diffusion Kurtosis Imaging and Direct Propagator Estimation Using 6-D Compressed Sensing,

[C4] F. Steinbruecker, J. Sturm and D. Cremers,
Volumetric 3D Mapping in Real-Time on a CPU,

[C5] E. Rodola, S. R Bulo, T. Windheuser, M. Vestner and D. Cremers,
Dense Non-Rigid Shape Correspondence Using Random Forests,
*IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2014.

[C6] Y. Kee, M. Souiai, D. Cremers and J. Kim,
Sequential Convex Relaxation for Mutual-Information-Based Unsupervised Figure-Ground Segmentation,
*IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2014.
[C7] H. Alvarez, L.M. Paz, J. Sturm and D. Cremers, 
Collision Avoidance for Quadrotors with a Monocular Camera, 

[C8] J. Engel, T. Schöps and D. Cremers, 
LSD-SLAM: Large-Scale Direct Monocular SLAM, 
*European Conference on Computer Vision (ECCV)*, September 2014, Oral Presentation.

[C9] T. Schöps, J. Engel and D. Cremers, 
Semi-Dense Visual Odometry for AR on a Smartphone, 

[C10] T. Windheuser, M. Vestner, E. Rodola, R. Triebel and D. Cremers, 
Optimal Intrinsic Descriptors for Non-Rigid Shape Analysis, 

[C11] 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.

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[J4] T. Schoenemann, S. Masnou and D. Cremers,
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[J3] H. Jin, D. Cremers, D. Wang, A. Yezzi, E. Prados and S. Soatto, 
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[C1] T. Schoenemann, F. R. Schmidt and D. Cremers,
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