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and D. Cremers,
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[C27] L. von Stumberg, V. Usenko and D. Cremers,
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May 2018.

The TUM VI Benchmark for Evaluating Visual-Inertial Odometry,
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[C31] D. Schubert, N. Demmel, V. Usenko, J. Stueckler and D. Cremers,
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[C32] V. Usenko, N. Demmel and D. Cremers,
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[C33] I. Chiotellis, F. Zimmermann, D. Cremers and R. Triebel,
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[C34] M. Brucker, M. Durner, Z.-C. Marton, F. Balint-Benczedi, M. Sundermeyer and R. Trie-
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[C35] C. Nissler, M. Durner, Z.-C. Marton and R. Triebel,
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*Conference on Robot Learning (CoRL)*, 2018.

[C37] Haefner, B., Queau, Y., Möllenhoff, T., Cremers and D.,
Fight ill-posedness with ill-posedness: Single-shot variational depth super-resolution from shading,
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From Monocular SLAM to Autonomous Drone Exploration,
[C47] Florian Walch, Caner Hazirbas, Laura Leal-Taixe, Torsten Sattler, Sebastian Hilsenbeck and Daniel Cremers,
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[C83] D. Kochanov, A. Osep, J. Stueckler and B. Leibe,
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[C84] F. Engelmann, J. Stueckler and B. Leibe,
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[C85] M. Moeller, J. Diebold, G. Gilboa and D. Cremers,

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[C88] A. Kanezaki, E. Rodola and T. Harada,
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*Robotics Symposia (RS)*, Karuizawa, Japan, March 2015.

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*Dense Continuous-Time Tracking and Mapping with Rolling Shutter RGB-D Cameras*,  
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[C109] M. Souiai, M. R. Oswald, Y. Kee, J. Kim, M. Pollefeys and D. Cremers,  
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*Video Segmentation with Just a Few Strokes*,  
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*Model-Based Tracking at 300Hz using Raw Time-of-Flight Observations*,  
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*Semi-Joint Reconstruction for Diffusion MRI Denoising Imposing Similarity of Edges in Similar Diffusion-Weighted Images*,  
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6-D Compressed Sensing, 
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Volumetric 3D Mapping in Real-Time on a CPU, 
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Dense Non-Rigid Shape Correspondence Using Random Forests, 
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Figure-Ground Segmentation, 
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September 2014, Oral Presentation.

[C124] T. Schöps, J. Engel and D. Cremers, 
Semi-Dense Visual Odometry for AR on a Smartphone, 
September 2014, Best Short Paper Award.

[C125] T. Windheuser, M. Vestner, E. Rodola, R. Triebel and D. Cremers, 
Optimal Intrinsic Descriptors for Non-Rigid Shape Analysis, 
2014.

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[C127] R. Maier, J. Sturm and D. Cremers, 
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[C128] T. Gurdan, M. R. Oswald, D. Gurdan and D. Cremers, 
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Münster, Germany, Vol. 36, September 2014.

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[C130] C. Nieuwenhuis, S. Hawe, M. Kleinsteuber and D. Cremers,
Co-Sparse Textural Similarity for Interactive Segmentation,
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Generalized Connectivity Constraints for Spatio-temporal 3D Reconstruction,

[C132] E. Strekalovskiy and D. Cremers,
Real-Time Minimization of the Piecewise Smooth Mumford-Shah Functional,

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Anisotropic Laplace-Beltrami Operators for Shape Analysis,
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German Conference on Pattern Recognition, 2014.

[C138] S. Debnath, S. S. Baishya, R. Triebel, V. Dutt and D. Cremers,
Environment-adaptive Learning: How Clustering Helps to Obtain Good Training Data,

[C139] A. Kanezaki, E. Rodola, D. Cremers and T. Harada,
Learning Similarities for Rigid and Non-Rigid Object Detection,
International Conference on 3D Vision (3DV), 2014.

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INS-Camera Calibration without Ground Control Points,
9th IEEE ISIF Workshop on Sensor Data Fusion: Trends, Solutions, Applications (SDF), 2014.

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Towards Illumination-invariant 3D Reconstruction using ToF RGB-D Cameras,
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Adaptive Tool-Use Strategies for Anthropomorphic Service Robots,
Proc. of the 14th IEEE-RAS International Conference on Humanoid Robots (Humanoids),
to appear, November 2014.

[C143] D. Droeschel, J. Stueckler and S. Behnke,
Local Multi-Resolution Surfel Grids for MAV Motion Estimation and 3D Mapping,

[C144] J. Stueckler, A. Gutt and S. Behnke,
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Proc. of the Joint 45th International Symposium on Robotics (ISR) and 8th German Conference on Robotics (ROBOTIK), to appear, June 2014.

[C145] J. Stueckler and S. Behnke,
Efficient deformable registration of multi-resolution surfel maps for object manipulation skill transfer,

[C146] D. Droeschel, J. Stueckler and S. Behnke,
Local multi-resolution representation for 6D motion estimation and mapping with a continuously rotating 3D laser scanner,
Proc. of the IEEE Int. Conf. on Robotics and Automation (ICRA), 5221-5226, May 2014.

[C147] M. Schwarz, J. Stueckler and S. Behnke,
Mobile Teleoperation Interfaces with Adjustable Autonomy for Personal Service Robots,

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Dense Elastic 3D Shape Matching,

[C149] Bergbauer, Julia, Tari and Sibel,
Wimmelbild Analysis with Approximate Curvature Coding Distance Images,

[C150] Bergbauer, Julia, Tari and Sibel,
Top-down visual search in Wimmelbild,

[C151] F. Bergamasco, A. Albarelli, E. Rodola and A. Torsello,
Can a fully unconstrained imaging model be applied effectively to central cameras?,
2013.
[C152] M. Souiai, C. Niwuenhuis, E. Strekalovskiy and D. Cremers, 
Convex Optimization for Scene Understanding, 
ICCV Workshop on Graphical Models for Scene Understanding, 2013.

[C153] J. Bergbauer, C. Niwuenhuis, M. Souiai and D. Cremers, 
Proximity Priors for Variational Semantic Segmentation and Recognition, 
ICCV Workshop on Graphical Models for Scene Understanding, 2013.

[C154] V. Golkov, T. Sprenger, A. Menini, M.I. Menzel, D. Cremers and J.I. Sperl, 
Effects of Low-Rank Constraints, Line-Process Denoising, and q-Space Compressed Sensing on Diffusion MR Image Reconstruction and Kurtosis Tensor Estimation, 
2013, Oral Presentation.

[C155] V. Golkov, T. Sprenger, M.I. Menzel, D. Cremers and J.I. Sperl, 
Line-Process-Based Joint SENSE Reconstruction of Diffusion Images with Intensity Inhomogeneity Correction and Noise Non-Stationarity Correction, 
2013, Certificate of Merit Award.

[C156] V. Golkov, M.I. Menzel, T. Sprenger, A. Menini, D. Cremers and J.I. Sperl, 
Reconstruction, Regularization, and Quality in Diffusion MRI Using the Example of Accelerated Diffusion Spectrum Imaging, 
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[C157] V. Golkov, M.I. Menzel, T. Sprenger, A. Menini, D. Cremers and J.I. Sperl, 
Corrected Joint SENSE Reconstruction, Low-Rank Constraints, and Compressed-Sensing-Accelerated Diffusion Spectrum Imaging in Denoising and Kurtosis Tensor Estimation, 
ISMRM Workshop on Diffusion as a Probe of Neural Tissue Microstructure, 2013.

SNR-dependent Quality Assessment of Compressed-Sensing-Accelerated Diffusion Spectrum Imaging Using a Fiber Crossing Phantom, 
2013.

Phase Sensitive Reconstruction in Diffusion Spectrum Imaging Enabling Velocity Encoding and Unbiased Noise Distribution, 
2013.

Noise Reduction in Accelerated Diffusion Spectrum Imaging through Integration of SENSE Reconstruction into Joint Reconstruction in Combination with q-Space Compressed Sensing, 
2013.

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Robust Odometry Estimation for RGB-D Cameras, 
May 2013, Best Vision Paper Award - Finalist.
[C162] E. Toepppe, C. Nieuwenhuis and D. Cremers,
Volume Constraints for Single View Reconstruction,
Portland, USA, 2013.

Toward Automated Driving in Cities using Close-to-Market Sensors,

[C164] H. Grimmett, R. Paul, R. Triebel and I. Posner,
Knowing When We Dont Know: Introspective Classification for Mission-Critical Decision Making,

[C165] D. Weikersdorfer, A. Schick and D. Cremers,

[C166] R. Triebel, H. Grimmett and I. Posner,
Confidence Boosting: Improving the Introspectiveness of a Boosted Classifier for Efficient Learning,

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[C168] E. Bylow, J. Sturm, C. Kerl, F. Kahl and D. Cremers,
Real-Time Camera Tracking and 3D Reconstruction Using Signed Distance Functions,

[C169] E. Bylow, J. Sturm, C. Kerl, F. Kahl and D. Cremers,
Direct Camera Pose Tracking and Mapping With Signed Distance Functions,
Demo Track of the RGB-D Workshop on Advanced Reasoning with Depth Cameras at the Robotics: Science and Systems Conference (RSS), June 2013.

[C170] J. Sturm and W. Burgard,
Learning Probabilistic Models for Mobile Manipulation Robots,
Proc. of the International Joint Conference on Artificial Intelligence (IJCAI), Track on Best papers in Sister Conferences, 2013.

[C171] M. Souiai, E. Strekalovskiy, C. Nieuwenhuis and D. Cremers,

[C172] F. Stangl, M. Souiai and D. Cremers,
Performance Evaluation of Narrow Band Methods for Variational Stereo,
35th German Conference on Pattern Recognition (GCPR), 2013.
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Efficient Convex Optimization for Minimal Partition Problems with Volume Constraints,
2013.

[C174] C. Kerl, J. Sturm and D. Cremers,
Dense Visual SLAM for RGB-D Cameras,

[C175] T. Naseer, J. Sturm and D. Cremers,
FollowMe: Person Following and Gesture Recognition with a Quadrocopter,

[C176] M. Klodt, J. Sturm and D. Cremers,
Scale-Aware Object Tracking with Convex Shape Constraints on RGB-D Images,
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[C177] J. Sturm, E. Bylow, F. Kahl and D. Cremers,
Dense Tracking and Mapping with a Quadrocopter,
Unmanned Aerial Vehicle in Geomatics (UAV-g), Rostock, Germany, September 2013.

[C178] D. Bender, M. Schikora, J. Sturm and D. Cremers,
Graph-based bundle adjustment for INS-camera calibration,
Unmanned Aerial Vehicle in Geomatics (UAV-g), Rostock, Germany, September 2013, Best research paper award.

[C179] J. Sturm, E. Bylow, F. Kahl and D. Cremers,
CopyMe3D: Scanning and Printing Persons in 3D,
German Conference on Pattern Recognition (GCPR), Saarbrücken, Germany, September 2013.

[C180] E. Rodola, T. Harada, Y. Kuniyoshi and D. Cremers,
Efficient Shape Matching using Vector Extrapolation,
2013.

[C181] J. Engel, J. Sturm and D. Cremers,
Semi-Dense Visual Odometry for a Monocular Camera,
Sydney, Australia, December 2013.

[C182] E. Rodola, A. Torsello, T. Harada, Y. Kuniyoshi and D. Cremers,
Elastic Net Constraints for Shape Matching,
Sydney, Australia, December 2013.

[C183] J. Lellmann, E. Strekalovskiy, S. Koetter and D. Cremers,
Total Variation Regularization for Functions with Values in a Manifold,
Sydney, Australia, December 2013.

[C184] C. Nieuwenhuis, E. Strekalovskiy and D. Cremers,
Proportion Priors for Image Sequence Segmentation,
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[C185] J. Stühmer, P. Schröder and D. Cremers,
Tree Shape Priors with Connectivity Constraints using Convex Relaxation on General Graphs,
Sydney, Australia, December 2013, Oral Presentation.

[C186] G. Kuschk and D. Cremers,
Fast and Accurate Large-scale Stereo Reconstruction using Variational Methods,
ICCV Workshop on Big Data in 3D Computer Vision, Sydney, Australia, December 2013.

[C187] M. R. Oswald and D. Cremers,
A Convex Relaxation Approach to Space Time Multi-view 3D Reconstruction,
ICCV Workshop on Dynamic Shape Capture and Analysis (4DMOD), 2013.

[C188] F. Steinbruecker, C. Kerl, J. Sturm and D. Cremers,
Large-Scale Multi-Resolution Surface Reconstruction from RGB-D Sequences,
Sydney, Australia, 2013.

[C189] T. Naseer, J. Sturm and D. Cremers,
Interactive Person Following and Gesture Recognition with a Flying Robot,
Proc. of the Assistance and Service Robotics Workshop (ASROB) at the IEEE Int. Conf. on Intelligent Robots and Systems (IROS), Nov. 2013.

[C190] R. Triebel, H. Grimmert, R. Paul and I. Posner,
Driven Learning for Driving: How Introspection Improves Semantic Mapping,
The International Symposium on Robotics Research (ISRR), 2013.

[C191] D. Cremers, E. Rodola and T. Windheuser,
Relaxations for Minimizing Metric Distortion and Elastic Energies for 3D Shape Matching,

[C192] M. Schadler, J. Stueckler and S. Behnke,
Multi-resolution surfel mapping and real-time pose tracking using a continuously rotating 2D laser scanner,

[C193] J. Stueckler and S. Behnke,
Efficient Dense 3D Rigid-Body Motion Segmentation in RGB-D Video,

[C194] M. McEllhine, J. Stueckler and S. Behnke,
Joint detection and pose tracking of multi-resolution surfel models in RGB-D,

[C195] T. Fiolka, J. Stueckler, D. A. Klein, D. Schulz and S. Behnke,
Distinctive 3D surface entropy features for place recognition,,
[C196] A. Berner, Jun Li, D. Holz, J. Stueckler, S. Behnke and R. Klein,
Combining contour and shape primitives for object detection and pose estimation of prefabricated parts,

[C197] J. Stueckler and S. Behnke,
Hierarchical Object Discovery and Dense Modelling From Motion Cues in RGB-D Video,

[C198] M. Nieuwenhuisen, D. Droeschel, D. Holz, J. Stueckler, A. Berner, Jun Li, R. Klein and S. Behnke,
Mobile bin picking with an anthropomorphic service robot,

[C199] L. Gorelick, F. R. Schmidt and Y. Boykov,
Fast Trust Region for Segmentation,
Portland, Oregon, Jun 2013.

[C200] L. Ma, T. Whelan, E. Bondarev, P. H. N. de With and J. McDonald,
Planar simplification and texturing of dense point cloud maps,

[C201] E. Rodola, A.M. Bronstein, A. Albarelli, F. Bergamasco and A. Torsello,
A game-theoretic approach to deformable shape matching,

[C202] F. Endres, J. Hess, N. Engelhard, J. Sturm, D. Cremers and W. Burgard,
An Evaluation of the RGB-D SLAM System,

[C203] T. Ruehr, J. Sturm, D. Pangercic, M. Beetz and D. Cremers,
A Generalized Framework for Opening Doors and Drawers in Kitchen Environments,

[C204] Dominik Joho AND Gian Diego Tipaldi AND Nikolas Engelhard AND Cyrill Stachniss AND Wolfram Burgard,
Nonparametric Bayesian Models for Unsupervised Scene Analysis and Reconstruction,

[C205] M. Schikora, A. Gning, L. Mihaylova, D. Cremers, W. Koch and R. Streit,
Box-Particle Intensity Filter,

[C206] M. Schikora, A. Gning, L. Mihaylova, D. Cremers and W. Koch,
Box-Particle PHD Filter for Multi-Target Tracking,
15th International Conference on Information Fusion (FUSION), Singapore, July 2012.
[C207] L. Zhang, J. Sturm, D. Cremers and D. Lee,  
Real-Time Human Motion Tracking using Multiple Depth Cameras,  

[C208] E. Strekalovskiy, C. Nieuwenhuis and D. Cremers,  
Nonmetric Priors for Continuous Multilabel Optimization,  
Firenze, Italy, Springer, October 2012.

[C209] T. Windheuser, H. Ishikawa and D. Cremers,  
Generalized Roof Duality for Multi-Label Optimization: Optimal Lower Bounds and Persistency,  
Firenze, Italy, October 2012.

[C210] T. Windheuser, H. Ishikawa and D. Cremers,  
QPBO [QPBO arugorizumu no tachika ni yoru hiretsu mojura enerugi saishoka],  
Meeting on Image Recognition and Understanding, Fukuoka, Japan, August 2012.

[C211] M. R. Oswald, E. Toeppe and D. Cremers,  
Fast and Globally Optimal Single View Reconstruction of Curved Objects,  
Providence, Rhode Island, 534-541, June 2012.

[C212] E. Strekalovskiy, A. Chambolle and D. Cremers,  
A Convex Representation for the Vectorial Mumford-Shah Functional,  
Providence, Rhode Island, June 2012.

[C213] J. Engel, J. Sturm and D. Cremers,  
Camera-Based Navigation of a Low-Cost Quadrocopter,  

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