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[C45] Tim Meinhardt, Michael Moeller, Caner Hazirbas and Daniel Cremers, 
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2017.

Efficient Deformable Shape Correspondence via Kernel Matching, 
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[C51] V. Golyanik, K. Kim, R. Maier, M. Niessner, D. Stricker and J. Kautz, 
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[C52] T. Möllenhoff and D. Cremers, 
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[C53] Christian Nissler, Zoltan-Csaba Marton, Hannes Kisner, Ulrike Thomas and Rudolph Triebel, 
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[C65] A. Narr, R. Triebel and D. Cremers, 
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May 2016.

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SHREC16: Partial Matching of Deformable Shapes, 
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  May 2016.

[C70] J. Engel, V. Usenko and D. Cremers,
  A Photometrically Calibrated Benchmark For Monocular Visual Odometry,

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  Interactive Multi-label Segmentation of RGB-D Images,
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  Optimizing the Relevance-Redundancy Tradeoff for Efficient Semantic Segmentation,
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Real-Time Object Detection, Localization and Verification for Fast Robotic Depalletizing,  
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[C95] J. Engel, J. Stueckler and D. Cremers, 
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Semi-supervised Online Learning for Efficient Classification of Objects in 3D Data Streams, 
2015.

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Super-Resolution Keyframe Fusion for 3D Modeling with High-Quality Textures, 
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[C101] C. Kerl, J. Stueckler and D. Cremers, 
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[C102] M. Souiai, M. R. Oswald, Y. Kee, J. Kim, M. Pollefeys and D. Cremers, 
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2014.

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**Sequential Convex Relaxation for Mutual-Information-Based Unsupervised Figure-Ground Segmentation**,  
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**Collision Avoidance for Quadrotors with a Monocular Camera**, 

[C116] J. Engel, T. Schöps and D. Cremers, 
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September 2014, *Oral Presentation*.

[C117] T. Schöps, J. Engel and D. Cremers, 
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September 2014, *Best Short Paper Award*.

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Münster, Germany, Vol. 36, September 2014.

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**Real-Time Minimization of the Piecewise Smooth Mumford-Shah Functional**, 

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[C139] D. Droeschel, J. Stueckler and S. Behnke,
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Proc. of the IEEE Int. Conf. on Robotics and Automation (ICRA), 5221-5226, May 2014.

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2013.

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ICCV Workshop on Graphical Models for Scene Understanding, 2013.

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2013, Oral Presentation.

[C148] V. Golkov, T. Sprenger, M.I. Menzel, D. Cremers and J.I. Sperl,
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2013, Certificate of Merit Award.
[C149] V. Golkov, M.I. Menzel, T. Sprenger, A. Menini, D. Cremers and J.I. Sperl,
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Corrected Joint SENSE Reconstruction, Low-Rank Constraints, and Compressed-Sensing-Accelerated Diffusion Spectrum Imaging in Denoising and Kurtosis Tensor Estimation,
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[C154] C. Kerl, J. Sturm and D. Cremers,
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[C155] E. Toeppe, C. Nieuwenhuis and D. Cremers,


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[C158] D. Weikersdorfer, A. Schick and D. Cremers,
[C159] R. Triebel, H. Grimmett and I. Posner,
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[C161] E. Bylow, J. Sturm, C. Kerl, F. Kahl and D. Cremers,
Real-Time Camera Tracking and 3D Reconstruction Using Signed Distance Functions,

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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.

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[C167] C. Kerl, J. Sturm and D. Cremers,
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[C168] T. Naseer, J. Sturm and D. Cremers,
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[C169] M. Klodt, J. Sturm and D. Cremers,
Scale-Aware Object Tracking with Convex Shape Constraints on RGB-D Images,
*German Conference on Pattern Recognition (GCPR)*, Saarbrücken, Germany, September 2013.

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Dense Tracking and Mapping with a Quadrocopter,
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[C171] D. Bender, M. Schikora, J. Sturm and D. Cremers,
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*Unmanned Aerial Vehicle in Geomatics (UAV-g)*, Rostock, Germany, September 2013,
**Best research paper award.**

[C172] J. Sturm, E. Bylow, F. Kahl and D. Cremers,
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*German Conference on Pattern Recognition (GCPR)*, Saarbrücken, Germany, September 2013.

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*Efficient Shape Matching using Vector Extrapolation,*
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*Elastic Net Constraints for Shape Matching,*
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[C178] J. Stühmer, P. Schröder and D. Cremers,
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[C179] G. Kuschik and D. Cremers,
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Multi-resolution surfel mapping and real-time pose tracking using a continuously rotating 2D laser scanner, 

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Efficient Dense 3D Rigid-Body Motion Segmentation in RGB-D Video, 

[C187] M. McElhone, J. Stueckler and S. Behnke, 
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Distinctive 3D surface entropy features for place recognition, 

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[C191] M. Nieuwenhuisen, D. Droeschel, D. Holz, J. Stueckler, A. Berner, Jun Li, R. Klein and S. Behnke, 
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[C192] L. Gorelick, F. R. Schmidt and Y. Boykov, 
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A Generalized Framework for Opening Doors and Drawers in Kitchen Environments,

[C197] Dominik Joho AND Gian Diego Tipaldi AND Nikolas Engelhard AND Cyrill Stachniss
AND Wolfram Burgard,
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A Benchmark for the Evaluation of RGB-D SLAM Systems, 

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[C218] S. Muszynski, J. Stueckler and S. Behnke,
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[C219] T. Fiolka, J. Stueckler, D. A. Klein, D. Schulz and S. Behnke,
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[C220] G. M. Garcia, D. A. Klein, J. Stueckler, S. Frintrop and A. B. Cremers,
Adaptive Multi-cue 3D Tracking of Arbitrary Objects,

[C221] J. Stueckler and S. Behnke,

[C222] M. Nieuwenhuisen, J. Stueckler, A. Berner, R. Klein and S. Behnke,
Shape-Primitive Based Object Recognition and Grasping,

[C223] J. Kläss, J. Stueckler and S. Behnke,
Efficient Mobile Robot Navigation using 3D Surfel Grid Maps,

[C224] J. Stueckler and S. Behnke,
Robust Real-Time Registration of RGB-D Images using Multi-Resolution Surfel Representations,

[C225] V. Usenko, F. Seidel, Z. Marton, D. Pangercic and M. Beetz,
Furniture Classification using WWW CAD Models,

[C226] F. R. Schmidt and Y. Boykov,
Hausdorff Distance Constraint for Multi-Surface Segmentation,

[C227] L. Gorelick, F. R. Schmidt, Y. Boykov, A. Delong and A. Ward,
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[C228] A. Torsello, E. Rodola and A. Albarelli,
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[C229] F. Bergamasco, A. Albarelli, E. Rodola and A. Torsello,
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113-120, 2011.

[C230] A. Albarelli, E. Rodola and A. Torsello,
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[C231] A. Torsello, E. Rodola and A. Albarelli,
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[C232] T. Windheuser, U. Schlickewei, F. R. Schmidt and D. Cremers,
Geometrically Consistent Elastic Matching of 3D Shapes: A Linear Programming Solution,
2011.

[C233] M. Aubry, U. Schlickewei and D. Cremers,
Pose-Consistent 3D Shape Segmentation Based on a Quantum Mechanical Feature Descriptor,
Frankfurt, Germany, Springer, 2011.

[C234] T. Schoenemann, S. Masnou and D. Cremers,
On a linear programming approach to the discrete Willmore boundary value problem and generalizations,

[C235] E. Strekalovskiy and D. Cremers,
Total Variation for Cyclic Structures: Convex Relaxation and Efficient Minimization,

[C236] B. Goldluecke and D. Cremers,
Introducing Total Curvature for Image Processing,
2011.

[C237] E. Strekalovskiy, B. Goldluecke and D. Cremers,
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2011.

[C238] M. Aubry, K. Kolev, B. Goldluecke and D. Cremers,
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2011.

[C239] E. Strekalovskiy and D. Cremers,
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2011.
[C240] J. Hess, J. Sturm and W. Burgard,
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[C241] N. Engelhard, F. Endres, J. Hess, J. Sturm and W. Burgard,
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Towards a benchmark for RGB-D SLAM evaluation,

[C243] C. Nieuwenhuis, E. Toeppe and D. Cremers,
Space-Varying Color Distributions for Interactive Multiregion Segmentation: Discrete versus Continuous Approaches,
177-190, 2011.

[C244] M. Klodt and D. Cremers,

[C245] M. Aubry, U. Schlickewei and D. Cremers,
The Wave Kernel Signature: A Quantum Mechanical Approach To Shape Analysis,
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[C246] F. Steinbruecker, J. Sturm and D. Cremers,
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[C248] M. Schikora, M. Oispuu, W. Koch and D. Cremers,
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[C249] S. Madhogaria, M. Schikora, W. Koch and D. Cremers,
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[C251] M. Oispuu and M. Schikora,
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[C252] M. Schikora, W. Koch and D. Cremers,
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[C253] E. Toeppe, M. R. Oswald, D. Cremers and C. Rother,
Silhouette-Based Variational Methods for Single View Reconstruction,

[C254] M. R. Oswald, E. Toeppe, C. Nieuwenhuis and D. Cremers,
A Survey on Geometry Recovery from a Single Image with Focus on Curved Object Reconstruction,

[C255] J. Shin, R. Triebel and R. Siegwart,
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[C257] B. Oehler, J. Stueckler, J. Welle, D. Schulz and S. Behnke,
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[C258] J. Stueckler and S. Behnke,
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Towards joint attention for a domestic service robot - person awareness and gesture recognition using Time-of-Flight cameras,
Proc. of the IEEE Int. Conf. on Robotics and Automation (ICRA), 1205-1210, May 2011.

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Learning to Interpret Pointing Gestures with a Time-of-flight Camera,

Multilinear Model Estimation with L2-Regularization,

Interactive Segmentation with Super-Labels,

Robust Camera Calibration using Inaccurate Targets,
2010.

A Game-Theoretic Approach to Robust Selection of Multi-View Point Correspondence,
20th International Conference on Pattern Recognition (ICPR), 57-60, 2010.

Robust Figure Extraction on Textured Background: a Game-Theoretic Approach,

A Game-Theoretic Approach to the Enforcement of Global Consistency in Multi-View Feature Matching,

A Game-Theoretic Approach to Fine Surface Registration without Initial Motion Estimation,

Robust Game-Theoretic Inlier Selection for Bundle Adjustment,
5th International Symposium on 3D Data Processing, Visualization and Transmission (3DPVT), 2010, Best Student Paper Award.

Loosely Distinctive Features for Robust Surface Alignment,
519-532, 2010.
[C273] M. Schikora, A. Schikora, K.-H. Kogel, W. Koch and D. Cremers, 
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5th IEEE ISIF Workshop on Sensor Data Fusion: Trends, Solutions, Applications (SDF), Leipzig, Germany, September 2010.

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[C275] M. Schikora, D. Bender, W. Koch and D. Cremers, 
Multi-target multi-sensor localization and tracking using passive antenna and optical sensors on UAVs, 

[C276] E. Toeppe, M. R. Oswald, D. Cremers and C. Rother, 
Image-based 3D Modeling via Cheeger Sets, 
Queenstown, New Zealand, 53-64, November 2010, Received Honorable Mention Award.

[C277] J. Stühmer, S. Gumhold and D. Cremers, 
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[C278] J. Stühmer, S. Gumhold and D. Cremers, 
Parallel Generalized Thresholding Scheme for Live Dense Geometry from a Handheld Camera, 
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[C279] B. Goldluecke and D. Cremers, 
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[C281] C. Nieuwenhuis and D. Kondermann, 
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[C282] C. Nieuwenhuis, B. Berkels and M. Rumpf, 
Interactive Motion Segmentation, 

[C283] J. Sturm, K. Konolige, C. Stachniss and W. Burgard, 
3D Pose Estimation, Tracking and Model Learning of Articulated Objects from Dense Depth Video using Projected Texture Stereo, 
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Vision-based Detection for Learning Articulation Models of Cabinet Doors and Drawers in Household Environments,

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Tactile Object Class and Internal State Recognition for Mobile Manipulation,

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[C287] R. Kaestner, N. Engelhard, R. Triebel and R. Siegwart,
A Bayesian Approach to Learning 3D Representations of Dynamic Environments,

[C288] L. Spinello, R. Triebel, D. Vasquez, K. Arras and R. Siegwart,
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A Layered Approach to People Detection in 3D Range Data,
special track on Physically Grounded AI of AAAI, 2010.

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[C293] K. Gräve, J. Stueckler and S. Behnke,
Improving imitated grasping motions through interactive expected deviation learning,
Proc. of the 10th IEEE-RAS Int. Conf. on Humanoid Robots (Humanoids), 397-404, December 2010.

[C294] J. Stueckler and S. Behnke,
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Proc. of the IEEE/RSJ Int. Conf. on Intelligent Robots and Systems (IROS), 4566-4571, October 2010.
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[C295] J. Stueckler and S. Behnke,  
Improving People Awareness of Service Robots by Semantic Scene Knowledge,  
del Solar, Javier Ruiz, Chown, Eric, Plöger and Paul-Gerhard(Eds.), RobuCup, Springer,  

[C296] D. Holz, R. Schnabel, D. Droeschel, J. Stueckler and S. Behnke,  
Towards Semantic Scene Analysis with Time-of-flight Cameras,  
del Solar, Javier Ruiz, Chown, Eric, Plöger and Paul-Gerhard(Eds.), RobuCup, Springer,  

[C297] H. Schulz, W. Liu, J. Stueckler and S. Behnke,  
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del Solar, Javier Ruiz, Chown, Eric, Plöger and Paul-Gerhard(Eds.), RobuCup, Springer,  

[C298] K. Gräve, J. Stueckler and S. Behnke,  
Learning Motion Skills from Expert Demonstrations and Own Experience using Gaussian Process Regression,  

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Intuitive Multimodal Interaction for Domestic Service Robots,  

[C300] M. Nieuwenhuisen, J. Stueckler and S. Behnke,  
Improving indoor navigation of autonomous robots by an explicit representation of doors,  
Proc. of the IEEE Int. Conf. on Robotics and Automation (ICRA), 4895-4901, May 2010.

[C301] D. Droeschel, D. Holz, J. Stueckler and S. Behnke,  
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[C302] Mösenlechner, Lorenz, Demmel, Nikolaus, Beetz and Michael,  
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[C303] A. Albarelli, E. Rodola, S. Rota Bulo and A. Torsello,  
Fast 3D surface reconstruction by unambiguous compound phase coding,  
the 2009 IEEE International Workshop on 3D Digital Imaging and Modeling (3DIM),  

[C304] M. R. Oswald, E. Toeppe, K. Kolev and D. Cremers,  
Non-Parametric Single View Reconstruction of Curved Objects using Convex Optimization,  
Jena, Germany, 171-180, September 2009. Received a DAGM Paper Award.

[C305] F. R. Schmidt and D. Cremers,  
A Closed-Form Solution for Image Sequence Segmentation with Dynamical Shape Priors,  
Jena, Germany, September 2009.
[C306] F. R. Schmidt, E. Toeppe and D. Cremers, 
Efficient Planar Graph Cuts with Applications in Computer Vision, 
Miami, Florida, 351-356, June 2009, Received a CVPR Doctoral Spotlight Award.

[C307] T. Pock, A. Chambolle, H. Bischof and D. Cremers, 
A Convex Relaxation Approach for Computing Minimal Partitions, 

[C308] A. Wedel, C. Rabe, A. Meissner, U. Franke and D. Cremers, 
Detection and Segmentation of Independently Moving Objects from Dense Scene Flow, 

[C309] B. Goldluecke and D. Cremers, 
A Superresolution Framework for High-Accuracy Multiview Reconstruction, 
Jena, Germany, 2009, Received DAGM Best Paper Award.

[C310] B. Goldluecke and D. Cremers, 
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Kyoto, Japan, 2009.

[C311] A. Sellent, M. Eisemann, B. Goldluecke, T. Pock, D. Cremers and M. Magnor, 
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[C312] T. Pock, D. Cremers, H. Bischof and A. Chambolle, 
An Algorithm for Minimizing the Piecewise Smooth Mumford-Shah Functional, 
Kyoto, Japan, 2009.

[C313] A. Wedel, D. Cremers, T. Pock and H. Bischof, 
Structure- and Motion-adaptive Regularization for High Accuracy Optic Flow, 
Kyoto, Japan, 2009.

[C314] T. Schoenemann, F. Kahl and D. Cremers, 
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Kyoto, Japan, 2009.

[C315] T. Windheuser, T. Schoenemann and D. Cremers, 
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[C316] F. Steinbruecker, T. Pock and D. Cremers, 
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Kyoto, Japan, 2009.

[C317] D. Mitzel, T. Pock, T. Schoenemann and D. Cremers, 
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Jena, Germany, 2009.

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Reconstructing Optical Flow Fields by Motion Inpainting, 
[C319] C. Eppner, J. Sturm, M. Bennewitz, C. Stachniss and W. Burgard, 
Imitation Learning with Generalized Task Descriptions, 
Kobe, Japan, May 2009.

[C320] H. Schulz, L. Ott, J. Sturm and W. Burgard, 
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Towards Understanding Articulated Objects, 

Learning Kinematic Models for Articulated Objects, 
Proc. of the International Joint Conference on Artificial Intelligence (IJCAI), July 2009.

[C323] D. Meyer-Delius, J. Sturm and W. Burgard, 
Regression-Based Online Situation Recognition for Vehicular Traffic Scenarios, 

[C324] A. Schneider, J. Sturm, C. Stachniss, M. Reisert, H. Burkhardt and W. Burgard, 
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[C325] F. Steinbruecker, T. Pock and D. Cremers, 
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Braunschweig, Germany, 2009.

[C326] M. Schikora and B. Romba, 
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[C327] M. Schikora, 
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[C328] M. Schikora, M. Häge, E. Ruthotto and K. Wild, 
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12th International Conference on Information Fusion (FUSION), Seattle, WA, USA, July 2009.

[C329] L. Spinello, A. Macho, R. Triebel and R. Siegwart, 
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**Medial Features for Superpixel Segmentation**,  

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**Integrating indoor mobility, object manipulation, and intuitive interaction for domestic service tasks**,  
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[C333] J. Stueckler, M. Schreiber and S. Behnke,  
**Dynamaid, an Anthropomorphic Robot for Research on Domestic Service Applications**,  

[C334] T. Schoenemann, F. R. Schmidt and D. Cremers,  
**Image Segmentation with Elastic Shape Priors via Global Geodesics in Product Spaces**,  

[C335] T. Pock, T. Schoenemann, G. Graber, H. Bischof and D. Cremers,  
**A Convex Formulation of Continuous Multi-Label Problems**,  
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[C336] A. Wedel, C. Rabe, T. Vaudrey, T. Brox, U. Franke and D. Cremers,  
**Efficient Dense Scene Flow from Sparse or Dense Stereo Data**,  
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**Duality TV-L1 Flow with Fundamental Matrix Prior**,  

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**An Experimental Comparison of Discrete and Continuous Shape Optimization Methods**,  

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**An Improved Algorithm for TV-L1 Optical Flow**,  

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**Matching Non-rigidly Deformable Shapes Across Images: A Globally Optimal Solution**,  
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[C344] T. Schoenemann and D. Cremers,
**High Resolution Motion Layer Decomposition using Dual-space Graph Cuts,**
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[C345] B. Rosenhahn, T. Brox, D. Cremers and H.-P. Seidel,
**Modeling and Tracking Line-Constrained Mechanical Systems,**

[C346] O. Kleinschmidt, T. Brox and D. Cremers,
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*Int. Workshop on Local and Nonlocal Approximation*, Lausanne, Switzerland, August 2008.

[C347] C. Nieuwenhuis, R. Mester and C. Garbe,
**A Statistical Confidence Measure for Optical Flows,**
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[C348] B. Andres, C. Nieuwenhuis, D. Kondermann, U. Köthe and R. Hamprecht,
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[C349] C. Nieuwenhuis, D. Kondermann and C. Garbe,
**Postprocessing of Optical Flows via Surface Measures and Motion Inpainting,**

[C350] J. Sturm, C. Plagemann and W. Burgard,
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**Motion Estimation Based on a Temporal Model of Fluid Flows,**

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**Multimodal Detection and Tracking of Pedestrians in Urban Environments with Explicit Ground Plane Extraction,**

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**Multimodal People Detection and Tracking in Crowded Scenes,**
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**In-lane Localization in Road Networks using Curbs Detected in Omnidirectional Height Images,**

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**Monocular Video Serves RADAR-based Emergency Braking,**
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*On the Statistical Interpretation of the Piecewise Smooth Mumford-Shah Functional,*  

C. Schmaltz, B. Rosenhahn, T. Brox, D. Cremers, J. Weickert, L. Wietzke and G. Sommer,  
*Region-based Pose Tracking,*  

D. Cremers, O. Fluck, M. Rousson and S. Aharon,  
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*Proc. of the SPIE Medical Imaging,* San Diego, USA, February 2007.

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