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[C179] T. Möllenhoff, E. Strekalovskiy, M. Möller and D. Cremers,
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[C180] M. Jaimez, M. Souiai, J. Gonzalez-Jimenez and D. Cremers,
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[C182] R. Mecca, E. Rodola and D. Cremers,
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[C187] A. Menini, V. Golkov and F. Wiesinger, 
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[C188] V. Golkov, A. Dosovitskiy, P. Sämann, J. I. Sperl, T. Sprenger, M. Czisch, M. I. Menzel, 
P. A. Gomez, A. Haase, T. Brox and D. Cremers, 
q-Space Deep Learning for Twelve-Fold Shorter and Model-Free Diffusion MRI Scans, 

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D. Cremers and T. Brox, 
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V. Evers, M. Fiore, H. Hung, O. A. I Ramirez, M. Joosse, H. Khambhaita, T. Kucner, B. 
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M. van Rooij and L. Zhang, 
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[C191] D. Holz, A. Topalidou-Kyniazopoulou, J. Stueckler and S. Behnke, 
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[C192] J. Engel, J. Stueckler and D. Cremers, 
Large-Scale Direct SLAM with Stereo Cameras, 

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[C194] Y. Tao, R. Triebel and D. Cremers, 
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[C195] R. Maier, J. Stueckler and D. Cremers, 
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[C197] M. Jaimez, M. Souiai, J. Stueckler, J. Gonzalez-Jimenez and D. Cremers,
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[C198] E. Rodola, M. Moeller and D. Cremers,
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[C200] M. Souiai, M. R. Oswald, Y. Kee, J. Kim, M. Pollefeys and D. Cremers,
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A Novel Framework for Nonlocal Vectorial Total Variation Based on $l^{p,q,r}$-norms,

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[C218] M. Strobel, J. Diebold and D. Cremers,
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[C219] R. Maier, J. Sturm and D. Cremers,
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*German Conference on Pattern Recognition (GCPR)*, Münster, Germany, September 2014, Oral Presentation.

[C220] T. Gurdan, M. R. Oswald, D. Gurdan and D. Cremers,
Spatial and Temporal Interpolation of Multi-View Image Sequences,
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[C222] C. Nieuwenhuis, S. Hawe, M. Kleinsteuber and D. Cremers,
Co-Sparse Textural Similarity for Interactive Segmentation,

[C223] M. R. Oswald, J. Stühmer and D. Cremers,
Generalized Connectivity Constraints for Spatio-temporal 3D Reconstruction,

[C224] E. Strekalovskiy and D. Cremers,
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[C225] A. Kanezaki, E. Rodola and T. Harada,
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[C226] A. Kanezaki, E. Rodola, D. Cremers and T. Harada,
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[C227] M. Andreux, E. Rodola, M. Aubry and D. Cremers,
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[C228] O. Dunkley, J. Engel, J. Sturm and D. Cremers,
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[C229] R. Triebel, J. Stühmer, M. Souiai and D. Cremers,
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[C230] S. Debnath, S. S. Baishya, R. Triebel, V. Dutt and D. Cremers,

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[C235] D. Droeschel, J. Stueckler and S. Behnke,

Local Multi-Resolution Surfel Grids for MAV Motion Estimation and 3D Mapping,

[C236] J. Stueckler, A. Gutt and S. Behnke,

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[C238] D. Droeschel, J. Stueckler and S. Behnke,

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[C239] M. Schwarz, J. Stueckler and S. Behnke,

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[C240] F. R. Schmidt, T. Windheuser, U. Schlickewei and D. Cremers, 
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[C241] J Bergbauer and S Tari, 
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[C242] J Bergbauer and S Tari, 
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[C243] F. Bergamasco, A. Albarelli, E. Rodola and A. Torsello, 
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[C244] M. Souiai, C. Nieuwenhuis, E. Strekalovskiy and D. Cremers, 
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[C246] V. Golkov, T. Sprenger, A. Menini, M.I. Menzel, D. Cremers and J.I. Sperl, 
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[C253] C. Kerl, J. Sturm and D. Cremers,
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[C254] E. Toeppe, C. Nieuwenhuis and D. Cremers,
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[C256] H. Grimmett, R. Paul, R. Triebel and I. Posner,
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[C257] A. SD. C D. Weikersdorfer,
Depth-adaptive Supervoxels for RGB-D Video Segmentation,

[C258] R. Triebel, H. Grimmett and I. Posner,
Confidence Boosting: Improving the Introspectiveness of a Boosted Classifier for Efficient Learning,
[C259] R. Triebel, H. Grimmett, R. Paul and I. Posner, 
**Introspective Active Learning for Scalable Semantic Mapping**,  

[C260] 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.

[C262] J. Sturm and W. Burgard,  
**Learning Probabilistic Models for Mobile Manipulation Robots**,  
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[C263] M. Souiai, E. Strekalovskiy, C. Nieuwenhuis and D. Cremers,  
**A Co-occurrence Prior for Continuous Multi-Label Optimization**,  

[C264] F. Stangl, M. Souiai and D. Cremers,  
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[C265] T. Möllenhoff, C. Nieuwenhuis, E. Toeppe and D. Cremers,  
**Efficient Convex Optimization for Minimal Partition Problems with Volume Constraints**,  

[C266] C. Kerl, J. Sturm and D. Cremers,  
**Dense Visual SLAM for RGB-D Cameras**,  

[C267] T. Naseer, J. Sturm and D. Cremers,  
**FollowMe: Person Following and Gesture Recognition with a Quadrocopter**,  

[C268] M. Klodt, J. Sturm and D. Cremers,  
**Scale-Aware Object Tracking with Convex Shape Constraints on RGB-D Images**,  
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[C269] 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.
[C270] D. Bender, M. Schikora, J. Sturm and D. Cremers,
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Unmanned Aerial Vehicle in Geomatics (UAV-g), Rostock, Germany, September 2013,
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[C276] C. Nieuwenhuis, E. Strekalovskiy and D. Cremers,
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[C277] J. Stühmer, P. Schröder and D. Cremers,
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[C278] G. Kuschk and D. Cremers,
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[C279] M. R. Oswald and D. Cremers,
A Convex Relaxation Approach to Space Time Multi-view 3D Reconstruction,
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[C280] F. Steinbruecker, C. Kerl, J. Sturm and D. Cremers,
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Joint detection and pose tracking of multi-resolution surfel models in RGB-D,

Distinctive 3D surface entropy features for place recognition,

Combining contour and shape primitives for object detection and pose estimation of prefabricated parts,

Hierarchical Object Discovery and Dense Modelling From Motion Cues in RGB-D Video,

Mobile bin picking with an anthropomorphic service robot,

Fast Trust Region for Segmentation,


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[C305] J. Engel, J. Sturm and D. Cremers,
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[C306] J. Sturm, N. Engelhard, F. Endres, W. Burgard and D. Cremers,
A Benchmark for the Evaluation of RGB-D SLAM Systems,

[C307] J. Engel, J. Sturm and D. Cremers,
Accurate Figure Flying with a Quadrocopter Using Onboard Visual and Inertial Sensing,

[C308] J. Sturm, W. Burgard and D. Cremers,
Evaluating Egomotion and Structure-from-Motion Approaches Using the TUM RGB-D Benchmark,

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[C311] N. Ufer, M. Souiai and D. Cremers,
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[C312] R. Paul, R. Triebel, D. Rus and P. Newman,
Semantic Categorization of Outdoor Scenes with Uncertainty Estimates using Multi-Class Gaussian Process Classification,

Parsing Outdoor Scenes from Streamed 3D Laser Data Using Online Clustering and Incremental Belief Updates,
[C314] U. Hubert, J. Stueckler and S. Behnke,
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[C315] J. Stueckler, N. Biresev and S. Behnke,
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[C316] J. Stueckler and S. Behnke,
Integrating depth and color cues for dense multi-resolution scene mapping using RGB-D cameras,
Proc. of the IEEE Int. Conf. on Multisensor Fusion and Integration for Intelligent Systems (MFI), 162-167, sep 2012.

[C317] S. Muszynski, J. Stueckler and S. Behnke,
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[C318] T. Fiolka, J. Stueckler, D. A. Klein, D. Schulz and S. Behnke,
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[C319] G. M. Garcia, D. A. Klein, J. Stueckler, S. Frintrop and A. B. Cremers,
Adaptive Multi-cue 3D Tracking of Arbitrary Objects,

[C320] J. Stueckler and S. Behnke,

[C321] M. Nieuwenhuisen, J. Stueckler, A. Berner, R. Klein and S. Behnke,
Shape-Primitive Based Object Recognition and Grasping,

[C322] J. Kläs, J. Stueckler and S. Behnke,
Efficient Mobile Robot Navigation using 3D Surfel Grid Maps,

[C323] J. Stueckler and S. Behnke,
Robust Real-Time Registration of RGB-D Images using Multi-Resolution Surfel Representations,

[C324] V. Usenko, F. Seidel, Z. Marton, D. Pangercic and M. Beetz,
Furniture Classification using WWW CAD Models,

[C325] F. R. Schmidt and Y. Boykov,
Hausdorff Distance Constraint for Multi-Surface Segmentation,
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[C326] L. Gorelick, F. R. Schmidt, Y. Boykov, A. Delong and A. Ward,
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[C327] A. Torsello, E. Rodola and A. Albarelli,
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[C328] F. Bergamasco, A. Albarelli, E. Rodola and A. Torsello,
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[C329] A. Albarelli, E. Rodola and A. Torsello,
A Non-Cooperative Game for 3D Object Recognition in Cluttered Scenes,
International Conference on 3D Imaging, Modeling, Processing, Visualization and Transmission (3DIMPVT), 252-259, 2011.

[C330] A. Torsello, E. Rodola and A. Albarelli,
Sampling Relevant Points for Surface Registration,
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[C331] T. Windheuser, U. Schlickewei, F. R. Schmidt and D. Cremers,
Geometrically Consistent Elastic Matching of 3D Shapes: A Linear Programming Solution,
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[C332] M. Aubry, U. Schlickewei and D. Cremers,
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[C333] T. Schoenemann, S. Masnou and D. Cremers,
On a linear programming approach to the discrete Willmore boundary value problem and generalizations,

[C334] E. Strekalovskiy and D. Cremers,
Total Variation for Cyclic Structures: Convex Relaxation and Efficient Minimization,

[C335] B. Goldluecke and D. Cremers,
Introducing Total Curvature for Image Processing,
IEEE International Conference on Computer Vision (ICCV), 2011.

[C336] E. Strekalovskiy, B. Goldluecke and D. Cremers,
Tight Convex Relaxations for Vector-Valued Labeling Problems,
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[C337] M. Aubry, K. Kolev, B. Goldluecke and D. Cremers,
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*IEEE International Conference on Computer Vision (ICCV)*, 2011.

[C338] E. Strekalovskiy and D. Cremers,
Generalized Ordering Constraints for Multilabel Optimization,
*IEEE International Conference on Computer Vision (ICCV)*, 2011.

[C339] J. Hess, J. Sturm and W. Burgard,
Learning the State Transition Model to Efficiently Clean Surfaces with Mobile Manipulation Robots,
*Proc. of the Workshop on Manipulation under Uncertainty at the IEEE Int. Conf. on Robotics and Automation (ICRA)*, Shanghai, China, May 2011.

[C340] N. Engelhard, F. Endres, J. Hess, J. Sturm and W. Burgard,
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Towards a benchmark for RGB-D SLAM evaluation,

[C342] C. Nieuwenhuis, E. Toeppe and D. Cremers,
Space-Varying Color Distributions for Interactive Multiregion Segmentation: Discrete versus Continuous Approaches,

[C343] M. Klodt and D. Cremers,
A Convex Framework for Image Segmentation with Moment Constraints,
*IEEE International Conference on Computer Vision (ICCV)*, 2011.

[C344] M. Aubry, U. Schlickewei and D. Cremers,
The Wave Kernel Signature: A Quantum Mechanical Approach To Shape Analysis,
*IEEE International Conference on Computer Vision (ICCV) - Workshop on Dynamic Shape Capture and Analysis (4DMOD)*, 2011.

[C345] F. Steinbruecker, J. Sturm and D. Cremers,
Real-Time Visual Odometry from Dense RGB-D Images,
*Workshop on Live Dense Reconstruction with Moving Cameras at the Intl. Conf. on Computer Vision (ICCV)*, 2011.

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*Proc. of the IROS’11 Workshop on Results, Challenges and Lessons Learned in Advancing Robots with a Common Platform*, San Francisco, CA, USA, 2011.
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[C347] M. Schikora, M. Oispuu, W. Koch and D. Cremers,
Multiple Source Localization Based on Biased Bearings Using the Intensity Filter - Approach and Experimental Results,
4th IEEE International Workshop on Computational Advances in Multi-Sensor Adaptive Processing, San Juan, Puerto Rico, December 2011.

[C348] S. Madhogaria, M. Schikora, W. Koch and D. Cremers,
Pixel-based Classification Method for Detecting Unhealthy Regions in Leaf Images,
6th IEEE ISIF Workshop on Sensor Data Fusion: Trends, Solutions, Applications (SDF), Berlin, Germany, September 2011.

[C349] M. Schikora, W. Koch, R.L. Streit and D. Cremers,
Sequential Monte Carlo Method for the iFilter,
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[C350] M. Oispuu and M. Schikora,
Multiple Emitter Localization Using a Realistic Airborne Array Sensor,
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[C531] M. Magnor and B. Goldluecke,
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[C532] B. Goldluecke and M. Magnor, 
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[C535] T. Brox, M. Rousson, R. Deriche and J. Weickert, 
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[C560] J. Keuchel, C. Schellewald, D. Cremers and C. Schnoerr,
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PhDThesis

[PhD1] V. Golkov,
Deep learning and variational analysis for high-dimensional and geometric biomedical data,
Department of Informatics, Technical University of Munich, Germany, 2021.

[PhD2] R. Maier,
High-Quality 3D Reconstruction from Low-Cost RGB-D Sensors,
Technische Universität München, München, Germany, 2020.

[PhD3] V Usenko,
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[PhD4] J Stühmer,
A Convex Optimization Framework for Connectivity Constraints in Image Segmentation and 3D Reconstruction,
Technische Universität München, München, 2016.

[PhD5] J. Stueckler,
Efficient Dense Registration, Segmentation, and Modeling Methods for RGB-D Environment Perception,
Faculty of Mathematics and Natural Sciences, University of Bonn, Germany, 2014.

[PhD6] K. Kolev,
Convexity in Image-Based 3D Surface Reconstruction,
Department of Computer Science, Technical University Munich, Germany, January 2012.

[PhD7] J. Sturm,
Approaches to Probabilistic Model Learning for Mobile Manipulation Robots,
University of Freiburg, Germany, May 2011, Received the Artificial Intelligence Dissertation Award 2011 (ECCAI) and the Wolfgang-Genter-Award 2011 (University of Freiburg); Finalist at the Georges-Giralt-Award 2012 (EURON); Selected for the Best Paper Track at IJCAI 2013.

[PhD8] C. Nieuwenhuis,
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[PhD9] T. Schoenemann,
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Multi-Camera Reconstruction and Rendering for Free-viewpoint Video,
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Faculty of Mathematics and Computer Science, Saarland University, Germany, apr 2005.

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Department of Mathematics and Computer Science, University of Mannheim, Germany, 2002.

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[M1] K. Knese,
Realizing Online (Self-)Collision Avoidance Based on Inequality Constraints with Hierarchical Inverse Kinematics,
Technical University of Munich, Germany, July 2014.

[M2] C Hazirbas,
Feature Selection and Learning for Semantic Segmentation,
Technical University Munich, Germany, June 2014.

[M3] T Schöps,
Semi-dense visual SLAM on mobile devices,
Technical University Munich, Germany, May 2014.

[M4] M. Shelley,
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[M5] OMW Dunkley,
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Technical University Munich, Germany, Sept. 2014.

[M6] R. Maier,
Out-of-Core Bundle Adjustment for 3D Workpiece Reconstruction,
Technische Universität München, Germany, September 2013.

[M7] M. Brandl,
Face recognition with wave kernel signatures using a depth camera,
Technical University of Munich, Germany, Aug. 2012.

[M8] C. Kerl,
Odometry from RGB-D Cameras for Autonomous Quadrocopters,
Technical University Munich, Germany, Nov. 2012.

[M9] J. Engel,
Autonomous Camera-Based Navigation of a Quadrocopter,
Technical University Munich, Germany, Dec. 2011, Distinguished with the SIEMENS award for best Master’s Thesis 2012.

[M10] M. Souiai,
Newton Methods for Total Variation Minimization,
Computer Vision Group, TU Munich, Germany, June 2010.
[M11] J. Stühmer,
Ein Variationsansatz zur Schätzung von dichten Tiefenkarten im Kontext des Structure-from-Motion,
TU Dresden, Germany, Jul 2010.

[M12] E. Toeppe,
Shape Matching mittels Graph Cuts,
University of Bonn, 2008, Awarded Best Master Thesis of the Year (Bonn Society for Computer Science).

[M13] M. R. Oswald,
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Universidad Tecnica Federico Santa Maria, Valparaiso, Chile, Jun 2008.

[M14] M. R. Oswald,
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Technische Universität Dresden, Germany, Jun 2007.

[M15] A. Wedel,
Detektion stationärer Hindernisse in monokularen Bildsequenzen,
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[M16] J. Sturm,
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[M17] T. Brox,
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[R2] A. Chambolle, D. Cremers and T. Pock,
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[R5] T. Brox, M. Rousson, R. Deriche and J. Weickert,
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[R6] B. Rosenhahn, U. Kersting, L. He, A. Smith, T. Brox, R. Klette and H. P. Seidel,
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