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[J1] J. Engel, V. Koltun and D. Cremers,
Direct Sparse Odometry,
March 2018.

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

[J3] Queau, Y., Mecca, R., Durou, J.-D., Descombes and X.,
Photometric Stereo with Only Two Images: A Theoretical Study and Numerical Resolution,

[J4] Bähr, M., Breus, M., Queau, Y., Bouroujerdi, A. S., Durou and J.-D.,
Fast and accurate surface normal integration on non-rectangular domains,

Tau Like Proteins Reduce Torque Generation in Microtubule Bundles,

[J6] E. Rodola, L. Cosmo, M. M. Bronstein, A. Torsello and D. Cremers,
Partial Functional Correspondence,

[J7] L. Cosmo, E. Rodola, A. Albarelli, F. Memoli and D. Cremers,
Consistent Partial Matching of Shape Collections via Sparse Modeling,

[J8] D. Boscaini, J. Masci, E. Rodola, M. M. Bronstein and D. Cremers,
Anisotropic Diffusion Descriptors,

[J9] F. Bergamasco, A. Albarelli, L. Cosmo, E. Rodola and A. Torsello,
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2016.

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q-Space Deep Learning: Twelve-Fold Shorter and Model-Free Diffusion MRI Scans,
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[J12] O. Litany, E. Rodola, A. M. Bronstein, M. M. Bronstein and D. Cremers,
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[J13] M. Strumia, F. R. Schmidt, C. Anastasopoulos, C. Granziera, G. Krueger and T. Brox,
White Matter MS-Lesion Segmentation Using a Geometric Brain Model,

[J14] Vestner, M., Litman, R., Bronstein, A., Rodola, E., Cremers and D.,
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[J15] Mecca, R., Queau, Y., Logothetis, F., Cipolla and R.,
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[J16] A. Albarelli, E. Rodola and A. Torsello,
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[J17] J. Diebold, C. Nieuwenhuis and D. Cremers,
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[J18] J. Diebold, S. Tari and D. Cremers,
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[J19] S. Madhogaria, P. M. Baggenstoss, M. Schikora, W. Koch and D. Cremers,
Car detection by fusion of HOG and causal MRF,

[J20] M. Klodt, K. Herzog, R. Töpfer and D. Cremers,
Field phenotyping of grapevine growth using dense stereo reconstruction,

[J21] M. Jaimez and J. Gonzalez-Jimenez,
Fast Visual Odometry for 3-D Range Sensors,

[J22] M. Jaimez, J. L. Blanco Claraco and J. Gonzalez-Jimenez,
Efficient Reactive Navigation with Exact Collision Determination for 3D Robot Shapes,

[J23] J. Stueckler and S. Behnke,
Efficient Dense Rigid-Body Motion Segmentation and Estimation in RGB-D Video,
January 2015.

NimbRo Explorer: Semi-Autonomous Exploration and Mobile Manipulation in Rough Terrain,
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Multi-Layered Mapping and Navigation for Autonomous Micro Aerial Vehi-

[J26] E. Rodola, A. Albarelli, D. Cremers and A. Torsello,
A Simple and Effective Relevance-based Point Sampling for 3D Shapes,

[J27] R. Mecca, E. Rodola and D. Cremers,
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Ratios,

[J28] T. Möllenhoff, E. Strekalovskiy, M. Möller and D. Cremers,
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Cloud-based collaborative 3D mapping in real-time with low-cost robots,

[J30] Hugo Grimmett, Rudolph Triebel, Rohan Paul and Ingmar Posner,
Introspective classification for robot perception,

[J31] T. Whelan, L. Ma, E. Bondarev, P. de With and J. McDonald,
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[J32] B. Goldluecke, M. Aubry, K. Kolev and D. Cremers,
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Convex Relaxation of Vectorial Problems with Coupled Regularization,

[J34] J. Engel, J. Sturm and D. Cremers,
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mera,

[J35] E. Rodola, S. Rota Bulo and D. Cremers,
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[J36] M. Schadler, J. Stueckler and S. Behnke,
Rough Terrain Mapping and Navigation using a Continuously Rotating 2D
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[J37] J. Stueckler, B. Waldvogel, H. Schulz and S. Behnke,
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[J39] E. Rodola, A. Albarelli, F. Bergamasco and A. Torsello,
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[J40] A. Torsello, A. Albarelli and E. Rodola,
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[J41] C. Nieuwenhuis and D. Cremers,
Spatially Varying Color Distributions for Interactive Multi-Label Segmentati-
on,

[J42] C. Nieuwenhuis, E. Toeppe and D. Cremers,
A Survey and Comparison of Discrete and Continuous Multi-label Optimiza-
tion Approaches for the Potts Model,

[J43] B. Goldluecke, E. Strekalovskiy and D. Cremers,
Tight Convex Relaxations for Vector-Valued Labeling,

[J44] F. Endres, J. Hess, J. Sturm, D. Cremers and W. Burgard,
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[J45] Liu, Z., Beetz, M., Cremers, D., Gall, J., Li, W., Pangercic, D., Sturm, J., Tai and Y.-W.,
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RGB-D cameras,

[J46] A. Albarelli, E. Rodola and A. Torsello,
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[J47] A. Chambolle, D. Cremers and T. Pock,
A Convex Approach to Minimal Partitions,

[J48] T. Schoenemann and D. Cremers,
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[J49] T. Schoenemann, F. Kahl, S. Masnou and D. Cremers,
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veng curvature penalization,
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[J52] B. Goldluecke, E. Strekalovskiy and D. Cremers,
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[J53] U. Schlickewei,
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[J57] J. Stueckler, R. Steffens, D. Holz and S. Behnke,
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[J58] J. Stueckler, R. Steffens, D. Holz and S. Behnke,
RoboCup@Home: Demonstrating Everyday Manipulation Skills in RoboCup@Home,

[J59] T. Windheuser, U. Schlickewei, F. R. Schmidt and D. Cremers,
Large-Scale Integer Linear Programming for Orientation-Preserving 3D Shape Matching,

[J60] D. Cremers and K. Kolev,
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[BC12] T. Brox, B. Rosenhahn and D. Cremers,  
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Faculty of Mathematics and Natural Sciences, University of Bonn, Germany, 2014.

[PhD2] K. Kolev,
Convexity in Image-Based 3D Surface Reconstruction,
Department of Computer Science, Technical University Munich, Germany, January 2012.

[PhD3] 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.

[PhD4] C. Nieuwenhuis,
Restoration and Prostprocessing of Optical Flows,
Faculty of Mathematics and Computer Science, Heidelberg University, Germany, July 2009.

[PhD5] T. Schoenemann,
Combinatorial Solutions for Shape Optimization in Computer Vision,
Department of Computer Science, University of Bonn, Germany, 2008.

[PhD6] B. Goldluecke,
Multi-Camera Reconstruction and Rendering for Free-viewpoint Video,
Max-Planck-Institute for Computer Science, Saarbrücken, Germany, July 2006.

[PhD7] T. Brox,
From pixels to regions: partial differential equations in image analysis,
Faculty of Mathematics and Computer Science, Saarland University, Germany, April 2005.

[PhD8] D. Cremers,
Statistical shape knowledge in variational image segmentation,
Department of Mathematics and Computer Science, University of Mannheim, Germany, 2002.

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[M1] K. Knese,
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Technical University of Munich, Germany, July 2014.

[M2] Caner Hazirbas,
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Technical University Munich, Germany, June 2014.

[M3] Thomas Schöps,
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[M4] M. Shelley,
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[M5] Oliver Montague Welton Dunkley,
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[M6] R. Maier,
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[M7] M. Brandl,
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Technical University of Munich, Germany, Aug. 2012.

[M8] C. Kerl,
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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, July 2010.

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

[M13] M. R. Oswald,
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[M14] M. R. Oswald,
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Technische Universität Dresden, Germany, June 2007.

[M15] A. Wedel,
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[M16] J. Sturm,
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[M17] T. Brox,
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Department of Mathematics and Computer Science, University of Mannheim, Germany,
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[M18] B. Goldluecke,
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[R1] M. Souiai, E. Strekalovskiy, C. Nieuwenhuis and D. Cremers,
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[R2] A. Chambolle, D. Cremers and T. Pock,
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