**List of Publications**

### Journal Articles

[J1] V. Usenko, N. Demmel, D. Schubert, J. Stueckler and D. Cremers,  
*Visual-Inertial Mapping with Non-Linear Factor Recovery*,  

[J2] L. von Stumberg, P. Wenzel, Q. Khan and D. Cremers,  

*Relocalization With Submaps: Multi-Session Mapping for Planetary Rovers Equipped With Stereo Cameras*,  

*ARDEA: An MAV with skills for future planetary missions*,  

[J5] Rodola, Emanuele, Lähner, Zorah, Bronstein, Alex M., Bronstein, Michael M., Solomon and Justin,  
*Functional Maps Representation on Product Manifolds*,  

[J6] F. Pasa, V. Golkov, F. Pfeiffer, D. Cremers and D. Pfeiffer,  
*Efficient Deep Network Architectures for Fast Chest X-Ray Tuberculosis Screening and Visualization*,  

[J7] J. Schuchardt, V. Golkov and D. Cremers,  
*Learning to Evolve*,  

*A Non-invasive 3D Body Scanner and Software Tool towards Analysis of Scoliosis*,  

[J9] Haefner, B., Peng, S., Verma, A., Queau, Y., Cremers and D.,  
*Photometric Depth Super-Resolution*,  

[J10] Brahimi, M., Queau, Y., Haefner, B., Cremers and D.,  
*On well-posedness of uncalibrated photometric stereo under general lighting*,  
[J11] Laude, E., Ochs, P., Cremers and D.,
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[J12] Mahesh Chandra Mukkamala, Felix Westerkamp, Emanuel Laude, Daniel Cremers and Peter Ochs,
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[J15] N. Yang, R. Wang, X. Gao and D. Cremers,
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[J16] Queau, Y., Durix, B., Wu, T., Cremers, D., Lauze, F., Durou and J.-D.,
LED-based Photometric Stereo: Modeling, Calibration and Numerical Solution,

[J17] Queau, Y., Durou, J.-D., Aujol and J.-F.,
Normal Integration: A Survey,

[J18] Queau, Y., Durou, J.-D., Aujol and J.-F.,
Variational Methods for Normal Integration,

[J19] Melou, J., Queau, Y., Durou, J.-D., Castan, F., Cremers and D.,
Variational Reflectance Estimation from Multi-view Images,

[J20] P. Bergmann, R. Wang and D. Cremers,
Online Photometric Calibration of Auto Exposure Video for Realtime Visual Odometry and SLAM,

[J21] E. Aljalbout, V. Golkov, Y. Siddiqui, M. Strobel and D. Cremers,
Clustering with Deep Learning: Taxonomy and New Methods,

[J22] L. Ma., J. Stueckler, T. Wu and D. Cremers,
Detailed Dense Inference with Convolutional Neural Networks via Discrete Wavelet Transform,
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[J23] Tjaden, Henning, Schwanecke, Ulrich, Schömer, Elmar, Cremers and Daniel,
A Region-based Gauss-Newton Approach to Real-Time Monocular Multiple Object Tracking,

[J24] Queau, Y., Mecca, R., Durou, J.-D., Descombes and X.,
Photometric Stereo with Only Two Images: A Theoretical Study and Numerical Resolution,

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[J26] Bähr, M., Breus, M., Queau, Y., Bouroujerdi, A. S., Durou and J.-D.,
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[J29] L. Cosmo, E. Rodola, A. Albarelli, F. Memoli and D. Cremers,
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Anisotropic Diffusion Descriptors,

[J31] F. Bergamasco, A. Albarelli, L. Cosmo, E. Rodola and A. Torsello,
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[J34] O. Litany, E. Rodola, A. M. Bronstein, M. M. Bronstein and D. Cremers,
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[J35] M. Strumia, F. R. Schmidt, C. Anastasopoulos, C. Granziera, G. Krueger and T. Brox, 
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[J36] Vestner, M., Litman, R., Bronstein, A., Rodola, E., Cremers and D., 
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[J37] Mecca, R., Queue, Y., Logothetis, F., Cipolla and R., 
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[J42] M. Klodt, K. Herzog, R. Töpfer and D. Cremers, 
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[J44] J. Stueckler and S. Behnke, 
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[J46] D. Droeschel, M. Nieuwenhuisen, M. Beul, J. Stueckler, D. Holz and S. Behnke, 
Multi-Layered Mapping and Navigation for Autonomous Micro Aerial Vehicles, 

[J47] E. Rodola, A. Albarelli, D. Cremers and A. Torsello, 
A Simple and Effective Relevance-based Point Sampling for 3D Shapes, 
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[J48] R. Mecca, E. Rodola and D. Cremers,
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[J49] T. Möllenhoff, E. Strekalovskiy, M. Möller and D. Cremers,
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[J51] Hugo Grimmett, Rudolph Triebel, Rohan Paul and Ingmar Posner,
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[J53] B. Goldluecke, M. Aubry, K. Kolev and D. Cremers,
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[J54] E. Strekalovskiy, A. Chambolle and D. Cremers,
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[J55] J. Engel, J. Sturm and D. Cremers,
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[J60] E. Rodola, A. Albarelli, F. Bergamasco and A. Torsello,
A Scale Independent Selection Process for 3D Object Recognition in Cluttered Scenes,
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[J68] A. Chambolle, D. Cremers and T. Pock,
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[J69] T. Schoenemann and D. Cremers,
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A linear framework for region-based image segmentation and inpainting involving curvature penalization,

[J71] D. Cremers,
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[J72] S. Chen, D. Cremers and R. J. Radke,
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[J73] B. Goldluecke, E. Strekalovskiy and D. Cremers,  
*The Natural Total Variation Which Arises from Geometric Measure Theory*,  

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[J75] K. Kolev, T. Brox and D. Cremers,  
*Fast Joint Estimation of Silhouettes and Dense 3D Geometry from Multiple Images*,  

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[J94] L.Spinello, R. Triebel and R. Siegwart, 
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[J95] T. Brox and D. Cremers, 
On local region models and a statistical interpretation of the piecewise smooth Mumford-Shah functional, 
[J96] T. Brox, B. Rosenhahn, J. Gall and D. Cremers,
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[J97] K. Kolev, M. Klodt, T. Brox and D. Cremers,
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[J98] A. Wedel, C. Rabe, H. Badino, H. Loose, U. Franke and D. Cremers,
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An appearance-based visual compass for mobile robots,

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