Multi-View 3D Reconstruction

List of Publications

[C1] Dzitsiuk, M., Sturm, J., Maier, R., Ma, L., Cremers and D.,
De-noising, Stabilizing and Completing 3D Reconstructions On-the-go using Plane Priors,

[C1] F. Steinbruecker, J. Sturm and D. Cremers,
*Volumetric 3D Mapping in Real-Time on a CPU*,
*Int. Conf. on Robotics and Automation*, Hongkong, China, 2014.

[C2] T. Gurdan, M. R. Oswald, D. Gurdan and D. Cremers,
*Spatial and Temporal Interpolation of Multi-View Image Sequences*,
*German Conference on Pattern Recognition (GCPR)*, Münster, Germany, Vol. 36, September 2014.

[C3] M. R. Oswald and D. Cremers,
*Surface Normal Integration for Convex Space-time Multi-view Reconstruction*,

[C4] M. R. Oswald, J. Stühmer and D. Cremers,
*Generalized Connectivity Constraints for Spatio-temporal 3D Reconstruction*,

[C1] 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.

[C2] 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.

[C3] F. Steinbruecker, C. Kerl, J. Sturm and D. Cremers,
*Large-Scale Multi-Resolution Surface Reconstruction from RGB-D Sequences*,
*IEEE International Conference on Computer Vision (ICCV)*, Sydney, Australia, 2013.

[J1] K. Kolev, T. Brox and D. Cremers,
*Fast Joint Estimation of Silhouettes and Dense 3D Geometry from Multiple Images*,
Multi-View 3D Reconstruction List of Publications

[J1] D. Cremers and K. Kolev,  
*Multiview Stereo and Silhouette Consistency via Convex Functionals over Convex Domains*,  

*A Variational Approach to Vesicle Membrane Reconstruction from Fluorescence Imaging*,  

[BC1] D. Cremers, T. Pock, K. Kolev and A. Chambolle,  
(Convex Relaxation Techniques for Segmentation, Stereo and Multiview Reconstruction*,  

[C1] M. Aubry, K. Kolev, B. Goldluecke and D. Cremers,  
*Decoupling Photometry and Geometry in Dense Variational Camera Calibration*,  
*IEEE International Conference on Computer Vision (ICCV)*, 2011.

[C1] K. Kolev, T. Pock and D. Cremers,  
*Anisotropic Minimal Surfaces Integrating Photoconsistency and Normal Information for Multiview Stereo*,  
*European Conference on Computer Vision (ECCV)*, Heraklion, Greece, September 2010.

[C2] J. Stühmer, S. Gumhold and D. Cremers,  
*Real-Time Dense Geometry from a Handheld Camera*,  
*Pattern Recognition (Proc. DAGM)*, Darmstadt, Germany, 11-20, September 2010.

[C3] J. Stühmer, S. Gumhold and D. Cremers,  
*Parallel Generalized Thresholding Scheme for Live Dense Geometry from a Handheld Camera*,  
*ECCV Workshop on Computer Vision on GPUs (CVGPU)*, Heraklion, Greece, September 2010.

[J1] K. Kolev, M. Klodt, T. Brox and D. Cremers,  
*Continuous Global Optimization in Multiview 3D Reconstruction*,  

[C1] K. Kolev and D. Cremers,  
*Continuous Ratio Optimization via Convex Relaxation with Applications to Multiview 3D Reconstruction*,  

[C2] B. Goldluecke and D. Cremers,  
*A Superresolution Framework for High-Accuracy Multiview Reconstruction*,  
*Pattern Recognition (Proc. DAGM)*, Jena, Germany, 2009, Received DAGM Best Paper Award.
K. Kolev and D. Cremers,
Integration of Multiview Stereo and Silhouettes via Convex Functionals on Convex Domains,
European Conference on Computer Vision (ECCV), Marseille, France, October 2008.

M. Klodt, T. Schoenemann, K. Kolev, M. Schikora and D. Cremers,
An Experimental Comparison of Discrete and Continuous Shape Optimization Methods,
European Conference on Computer Vision (ECCV), Marseille, France, October 2008.

B. Goldluecke, I. Ihrke, C. Linz and M. Magnor,
Weighted Minimal Hypersurface Reconstruction,

K. Kolev, M. Klodt, T. Brox and D. Cremers,
Propagated Photoconsistency and Convexity in Variational Multiview 3D Reconstruction,

K. Kolev, M. Klodt, T. Brox, S. Esedoglu and D. Cremers,
Continuous Global Optimization in Multiview 3D Reconstruction,

K. Kolev, T. Brox and D. Cremers,
Robust variational segmentation of 3D objects from multiple views,

B. Goldluecke and M. Magnor,
Spacetime-Continous Geometry Meshes from Multi-View Video Sequences,

I. Ihrke, B. Goldluecke and M. Magnor,
Reconstructing the Geometry of Flowing Water,

M. Magnor and B. Goldluecke,
Spacetime-coherent Geometry Reconstruction from Multiple Video Streams,
[C2] B. Goldluecke and M. Magnor,
Weighted Minimal Hypersurfaces and Their Applications in Computer Vision,
European Conference on Computer Vision (ECCV), Prague, Czech Republic, Springer,

[C3] B. Goldluecke and M. Magnor,
Space-Time Isosurface Evolution for Temporally Coherent 3D Reconstruction,
IEEE Conference on Computer Vision and Pattern Recognition (CVPR), Washington,

[C1] B. Goldluecke and M. Magnor,
Joint 3D Reconstruction and Background Separation in Multiple Views using
Graph Cuts,
IEEE Conference on Computer Vision and Pattern Recognition (CVPR), Madison, Wisconsin,