Author: V. Usenko  
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, 
IEEE Robotics and Automation Letters (RA-L) 38; Int. Conference on Intelligent Robotics 

"Cloud-based collaborative 3D mapping in real-time with low-cost robots, 

Conference and Workshop Papers

[C1] C. Sommer, V. Usenko, D. Schubert, N. Demmel and D. Cremers, 
"Efficient Derivative Computation for Cumulative B-Splines on Lie Groups, 
2020, Oral Presentation.

[C2] D. Schubert, N. Demmel, L. von Stumberg, V. Usenko and D. Cremers, 
"Rolling-Shutter Modelling for Visual-Inertial Odometry, 
November 2019.

[C3] L. von Stumberg, V. Usenko and D. Cremers, 
"Direct Sparse Visual-Inertial Odometry using Dynamic Marginalization, 
May 2018.

"The TUM VI Benchmark for Evaluating Visual-Inertial Odometry, 
October 2018.

[C5] D. Schubert, N. Demmel, V. Usenko, J. Stueckler and D. Cremers, 
"Direct Sparse Odometry With Rolling Shutter, 
September 2018, Oral Presentation.

[C6] V. Usenko, N. Demmel and D. Cremers, 
"The Double Sphere Camera Model, 

"From Monocular SLAM to Autonomous Drone Exploration, 
European Conference on Mobile Robots (ECMR), September 2017.

[C8] V. Usenko, L. von Stumberg, A. Pangeric and D. Cremers, 
"Real-Time Trajectory Replanning for MAVs using Uniform B-splines and a 
3D Circular Buffer, 
Vancouver, Canada, Sep 2017, Best Paper Award - Finalist ().

[C9] V. Usenko, J. Engel, J. Stueckler and D. Cremers, 
"Direct Visual-Inertial Odometry with Stereo Cameras, 
May 2016.

[C10] J. Engel, V. Usenko and D. Cremers, 
"A Photometrically Calibrated Benchmark For Monocular Visual Odometry, 
[C11] V. Usenko, J. Engel, J. Stueckler and D. Cremers, 
Reconstructing Street-Scenes in Real-Time From a Driving Car, 

[C12] V. Usenko, F. Seidel, Z. Marton, D. Pangercic and M. Beetz, 
Furniture Classification using WWW CAD Models, 

PhDThesis