Journal Articles

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

Conference and Workshop Papers

[C1] V. Usenko, N. Demmel, D. Schubert, J. Stueckler and D. Cremers, 
Visual-Inertial Mapping with Non-Linear Factor Recovery, 

[C2] 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.

[C4] D. Schubert, N. Demmel, V. Usenko, J. Stueckler and D. Cremers, 
Direct Sparse Odometry With Rolling Shutter, 
September 2018, *Oral Presentation*.

[C5] V. Usenko, N. Demmel and D. Cremers, 
The Double Sphere Camera Model, 

From Monocular SLAM to Autonomous Drone Exploration, 

[C7] V. Usenko, L. von Stumberg, A. Pangercic 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* ()

[C8] V. Usenko, J. Engel, J. Stueckler and D. Cremers, 
Direct Visual-Inertial Odometry with Stereo Cameras, 
May 2016.

[C9] J. Engel, V. Usenko and D. Cremers, 
A Photometrically Calibrated Benchmark For Monocular Visual Odometry, 

[C10] V. Usenko, J. Engel, J. Stueckler and D. Cremers, 
Reconstructing Street-Scenes in Real-Time From a Driving Car, 

Furniture Classification using WWW CAD Models, 
PhDThesis