Journal Publications

[J1] H. Matsuki, L. von Stumberg, V. Usenko, J. Stueckler and D. Cremers,
Omnidirectional DSO: Direct Sparse Odometry with Fisheye Cameras,
IEEE Robotics and Automation Letters 38; Int. Conference on Intelligent Robots and

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

Publications at Conferences and Workshops

[C1] 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.

[C3] D. Schubert, N. Demmel, V. Usenko, J. Stueckler and D. Cremers,
Direct Sparse Odometry With Rolling Shutter,
September 2018, Oral Presentation.

[C4] V. Usenko, N. Demmel and D. Cremers,
The Double Sphere Camera Model,

[C5] L. von Stumberg, V. Usenko, J. Engel, J. Stueckler and D. Cremers,
From Monocular SLAM to Autonomous Drone Exploration,
European Conference on Mobile Robots (ECMR), September 2017.

[C6] 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.

[C7] V. Usenko, J. Engel, J. Stueckler and D. Cremers,
Direct Visual-Inertial Odometry with Stereo Cameras,
May 2016.

[C8] J. Engel, V. Usenko and D. Cremers,
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[C9] 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,