

## Journal Articles

- [J1] G. Mohanarajah, V. Usenko, M. Singh, R. D'Andrea and M. Waibel,  
**Cloud-based collaborative 3D mapping in real-time with low-cost robots,**  
*IEEE Transactions on Automation Science and Engineering*, 12(2): 423-431, 2015.

## Conference and Workshop Papers

- [C1] V. Usenko, N. Demmel, D. Schubert, J. Stueckler and D. Cremers,  
**Visual-Inertial Mapping with Non-Linear Factor Recovery,**  
*arXiv:1904.06504*, 2019.
- [C2] L. von Stumberg, V. Usenko and D. Cremers,  
**Direct Sparse Visual-Inertial Odometry using Dynamic Marginalization,**  
May 2018.
- [C3] D. Schubert, T. Goll, N. Demmel, V. Usenko, J. Stueckler and D. Cremers,  
**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,**  
*Proc. of the Int. Conference on 3D Vision (3DV)*, September 2018.
- [C6] 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.
- [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,**  
*arXiv:1607.02555*, July 2016.
- [C10] V. Usenko, J. Engel, J. Stueckler and D. Cremers,  
**Reconstructing Street-Scenes in Real-Time From a Driving Car,**  
*Proc. of the Int. Conference on 3D Vision (3DV)*, October 2015.
- [C11] V. Usenko, F. Seidel, Z. Marton, D. Pangercic and M. Beetz,  
**Furniture Classification using WWW CAD Models,**  
*IROS'12 Workshop on Active Semantic Perception*, 2012.

**PhDThesis**