Journal Articles

[J1] T Yenamandra, A Tewari, N Yang, F Bernard, C Theobalt and D Cremers,

_HDSDF: Hybrid Directional and Signed Distance Functions for Fast Inverse Rendering_,
2022.

[J2] N. Yang, R. Wang, X. Gao and D. Cremers,

_Challenges in Monocular Visual Odometry: Photometric Calibration, Motion Bias and Rolling Shutter Effect_,

Conference and Workshop Papers

[C1] F. Wimbauer, N. Yang, L. von Stumberg, N. Zeller and D Cremers,

_MonoRec: Semi-Supervised Dense Reconstruction in Dynamic Environments from a Single Moving Camera_,
_IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2021._

[C2] L Koestler, N Yang, N Zeller and D Cremers,

_TANDEM: Tracking and Dense Mapping in Real-time using Deep Multi-view Stereo_,
_Conference on Robot Learning (CoRL), 2021, 3DV’21 Best Demo Award._

[C3] R. Wang, N. Yang, J. Stueckler and D. Cremers,

_DirectShape: Photometric Alignment of Shape Priors for Visual Vehicle Pose and Shape Estimation_,
_Proc. of the IEEE International Conference on Robotics and Automation (ICRA), 2020._

[C4] N. Yang, L. von Stumberg, R. Wang and D. Cremers,

_D3VO: Deep Depth, Deep Pose and Deep Uncertainty for Monocular Visual Odometry_,
_IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2020, Oral Presentation._

[C5] L. Koestler, N. Yang, R. Wang and D. Cremers,

_Learning Monocular 3D Vehicle Detection without 3D Bounding Box Labels_,
_Proceedings of the German Conference on Pattern Recognition (GCPR), 2020._


_4Seasons: A Cross-Season Dataset for Multi-Weather SLAM in Autonomous Driving_,
_Proceedings of the German Conference on Pattern Recognition (GCPR), 2020._

[C7] L. von Stumberg, P. Wenzel, N. Yang and D. Cremers,

_LM-Reloc: Levenberg-Marquardt Based Direct Visual Relocalization_,
_International Conference on 3D Vision (3DV), 2020._
[C8] E. Jung, N. Yang and D. Cremers,
Multi-Frame GAN: Image Enhancement for Stereo Visual Odometry in Low Light,
Conference on Robot Learning (CoRL), 2019, Full Oral Presentation.

[C9] N. Yang, R. Wang, J. Stueckler and D. Cremers,
Deep Virtual Stereo Odometry: Leveraging Deep Depth Prediction for Monocular Direct Sparse Odometry,
European Conference on Computer Vision (ECCV), September 2018, Oral Presentation.