

2023**Journal Articles**

- [J1] C Tomani, F Waseda, Y Shen and D Cremers,
Beyond In-Domain Scenarios: Robust Density-Aware Calibration,
arXiv preprint, 2023.
- [J2] S Klenk, L Koestler, D Scaramuzza and D Cremers,
E-nerf: Neural radiance fields from a moving event camera,
IEEE Robotics and Automation Letters, 8(3): 1587-1594, 2023.
- [J3] D Zhu, Q Khan and D Cremers,
Multi-Vehicle Trajectory Prediction at Intersections using State and Intention Information,
arXiv preprint, 2023.
- [J4] Q Khan, I Sülö, M Ocal and D Cremers,
Learning vision based autonomous lateral vehicle control without supervision,
Applied Intelligence, 1-13, 2023.
- [J5] T Wimmer, V Golkov, HN Dang, M Zaiss, A Maier and D Cremers,
Scale-Equivariant Deep Learning for 3D Data,
arXiv preprint, 2023.

Conference and Workshop Papers

- [C1] F Hofherr, L Koestler, F Bernard and D Cremers,
Neural Implicit Representations for Physical Parameter Inference from a Single Video,
IEEE/CVF Winter Conference on Applications of Computer Vision (WACV), 2023.
- [C2] L Sang, B Haefner, X Zuo and D Cremers,
High-Quality RGB-D Reconstruction via Multi-View Uncalibrated Photometric Stereo and Gradient-SDF,
IEEE Winter Conference on Applications of Computer Vision (WACV), Hawaii, USA, January 2023.
- [C3] L Härenstam-Nielsen, N Zeller and D Cremers,
Semidefinite Relaxations for Robust Multiview Triangulation,
IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2023.
- [C4] S Weber, N Demmel, T Chon Chan and D Cremers,
Power Bundle Adjustment for Large-Scale 3D Reconstruction,
IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2023.
- [C5] F Wimbauer, N Yang, C Rupprecht and D Cremers,
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IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2023.

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- [J1] M Brahim, B Haefner, T Yenamandra, B Goldluecke and D Cremers,
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- [J2] Z. Ye, B. Haefner, Y. Queau, T. Möllenhoff and D. Cremers,
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International Journal of Computer Vision (IJCV), 2022.
- [J3] C Tomani and D Cremers,
Challenger: Training with Attribution Maps,
arXiv preprint, 2022.
- [J4] L. von Stumberg and D. Cremers,
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- [J5] C. Brunner, A. Duensing, C. Schröder, M. Mittermair, V. Golkov, M. Pollanka, D. Cremers and R. Kienberger,
Deep Learning in Attosecond Metrology,
Optics Express, 30(9): 15669-15684, 2022, **Editor’s Pick**.
- [J6] T Yenamandra, A Tewari, N Yang, F Bernard, C Theobalt and D Cremers,
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- [J7] A Saroha, M Eisenberger, T Yenamandra and D Cremers,
Implicit Shape Completion via Adversarial Shape Priors,
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- [J8] S Klenk, D Bonello, L Koestler and D Cremers,
Masked Event Modeling: Self-Supervised Pretraining for Event Cameras,
arXiv preprint arXiv:2212.10368, 2022.
- [J9] P Wenzel, N Yang, R Wang, N Zeller and D Cremers,
4Seasons: Benchmarking Visual SLAM and Long-Term Localization for Autonomous Driving in Challenging Conditions,
arXiv preprint arXiv:2301.01147, 2022.

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- [C1] A Toker, L Kondmann, M Weber, M Eisenberger, C Andres, J Hu, A Hoderlein, C Senaras, T Davis, D Cremers, G Marchisio, X Zhu and L Leal-Taixe,
DynamicEarthNet: Daily Multi-Spectral Satellite Dataset for Semantic Change Segmentation,
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- [C2] M. Eisenberger, A. Toker, L. Leal-Taixe, F. Bernard and D. Cremers,
A Unified Framework for Implicit Sinkhorn Differentiation,
IEEE International Conference on Computer Vision and Pattern Recognition (CVPR),
2022.
- [C3] C Tomani, D Cremers and F Buettnner,
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- [C4] J. Veraart and 100 coauthors,
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- [C5] C Sommer, L Sang, D Schubert and D Cremers,
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- [C6] Z Ye, T Yenamandra, F Bernard and D Cremers,
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- [C7] D Muhle, L Koestler, N Demmel, F Bernard and D Cremers,
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- [C8] F Müller, Q Khan and D Cremers,
Lateral Ego-Vehicle Control Without Supervision Using Point Clouds,
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- [C9] L Hang, Q Khan, V Tresp and D Cremers,
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- [C10] D Das, Q Khan and D Cremers,
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- [C11] L Koestler, D Grittner, M Moeller, D Cremers and Z Lähner,
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- [C12] M Gladkova, N Korobov, N Demmel, A Osep, L Leal-Taixe and D Cremers,
**DirectTracker: 3D Multi-Object Tracking Using Direct Image Alignment and
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- [C13] HHH Hsu, Y Shen, C Tomani and D Cremers,
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- [C14] Y Shen and D Cremers,
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- [C15] HHH Hsu, Y Shen and D Cremers,
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- [J3] J. Chui, S. Klenk and D. Cremers,
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Recovering Real-world Reflectance Properties and Shading from HDR Imagery,
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- [C2] T Frerix, D Kochkov, J Smith, D Cremers, M Brenner and S Hoyer,
Variational Data Assimilation with a Learned Inverse Observation Operator,
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- [C3] M. Eisenberger, D. Novotny, G. Kerchenbaum, P. Labatut, N. Neverova, D. Cremers and A. Vedaldi,
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i3DMM: Deep Implicit 3D Morphable Model of Human Heads,
Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), June 2021, **Oral Presentation.**
- [C8] M Gao, Z Löhner, J Thunberg, D Cremers and F Bernard,
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- [C9] M Naeyaert, V Golkov, D Cremers, J Sijbers and M Verhoye,
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- [C10] P. Müller, V. Golkov, V. Tomassini and D. Cremers,
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- [C12] M Gladkova, R Wang, N Zeller and D Cremers,
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Proc. of the IEEE International Conference on Robotics and Automation (ICRA), 2021.

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Vision-Based Mobile Robotics Obstacle Avoidance With Deep Reinforcement Learning,
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- [C21] S Weber, N Demmel and D Cremers,
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- [C22] Y Wang, Y Shen and D Cremers,
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- [C2] L. Sang, B. Haefner and D. Cremers,
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- [C6] M. Eisenberger and D. Cremers,
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- [C13] J. Du, R. Wang and D. Cremers,
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- [C18] M Aygün, Z Lähner and D Cremers,
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