# Publication list

## Olaf Wysocki

## December 2023

### Accepted for publication:

- Wysocki, O., Hoegner, L. and Stilla, U. MLS2LoD3: Refining low LoDs building models with MLS point clouds to reconstruct semantic LoD3 building models, Accepted for publication in the proceedings of 3D GeoInfo 2023, Lecture Notes in Geoinformation and Cartography.
- Froech, T., Wysocki, O., Hoegner, L. and Stilla, U. Reconstructing facade details using MLS point clouds and Bag-of-Words approach, Accepted for publication in the proceedings of 3D GeoInfo 2023, Lecture Notes in Geoinformation and Cartography.
- Tan, Y., Wysocki, O., Hoegner, L. and Stilla, U. Classifying point clouds at the facade-level using geometric features and deep learning networks, Accepted for publication in the proceedings of 3D GeoInfo 2023, Lecture Notes in Geoinformation and Cartography.
- Schwarz, S., Pilz, T., Wysocki, O., Hoegner, L. and Stilla, U. Transferring facade labels between point clouds with semantic octrees while considering change detection, Accepted for publication in the proceedings of 3D GeoInfo 2023, Lecture Notes in Geoinformation and Cartography.

#### **Published:**

- Wysocki, O., Xia, Y., Wysocki M., Grilli, E., Hoegner, L., Cremers D., and Stilla, U. Scan2LoD3: Reconstructing semantic 3D building models at LoD3 using ray casting and Bayesian networks, *In: Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition*, 6547-6557, 2023, https://shorturl.at/qzSX0.
- Hoegner, L., Wysocki, O. and Stilla, U. Anreicherung von 3D Bestandsgebäudemodellen aus MLS Daten, 22. Internationale Geodätische Woche Obergurgl 2023, 198-208, 2023, https://shorturl.at/uxEJK.
- Wysocki, O., Grilli, E., Hoegner, L. and Stilla, U. Combining visibility analysis and deep learning for refinement of semantic 3D building models by conflict classification, ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences, X-4/W2-2022, 289-296, https://doi.org/10.5194/isprs-annals-X-4-W2-2022-289-2022, 2022.
- Wysocki, O., Hoegner, L. and Stilla, U. Refinement of semantic 3D building models by reconstructing underpasses from MLS point clouds, *International Journal of Applied Earth Observation and Geoinformation*, 111, 2022, 102841, https://doi.org/10.1016/j.jag.2022.102841, 2022.

- Wysocki, O., Hoegner, L. and Stilla, U. TUM-FAÇADE: Reviewing and enriching point cloud benchmarks for façade segmentation, *International Archives of the Photogrammetry, Remote Sensing & Spatial Information Sciences, XLVI-2/W1-2022, 529-536, https://doi.org/10.5194/isprs-archives-XLVI-2-W1-2022-529-2022, 2022*
- Wysocki, O., Xu, Y. and Stilla, U. Unlocking point cloud potential: Fusing MLS point clouds with semantic 3D building models while considering uncertainty, ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences, VIII-4/W2-2021, 45–52, https://doi.org/10.5194/isprs-annals-VIII-4-W2-2021-45-2021, 2021
- Wysocki, O., Schwab, B., Hoegner, L., Kolbe, TH. and Stilla, U. Plastic surgery for 3D city models: A pipeline for automatic geometry refinement and semantic enrichment, ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences, V-4-2021, 17-24, https://doi.org/10.5194/isprs-annals-V-4-2021-17-2021, 2021