## Publication list

## Olaf Wysocki

## December 2023

## Published:

- Wysocki, O., Hoegner, L. and Stilla, U. MLS2LoD3: Refining low LoDs building models with MLS point clouds to reconstruct semantic LoD3 building models, *In: International 3D GeoInfo Conference 2023, Recent Advances in 3D Geoinformation Science, 367-380. Cham: Springer Nature Switzerland, 2023, https://doi.org/10.1007/978-3-031-43699-4\_23.*
- Froech, T., Wysocki, O., Hoegner, L. and Stilla, U. Reconstructing facade details using MLS point clouds and Bag-of-Words approach, In: International 3D GeoInfo Conference 2023, Recent Advances in 3D Geoinformation Science, 337-355. Cham: Springer Nature Switzerland, 2023, https://doi.org/10.1007/978-3-031-43699-4-21.
- Tan, Y., Wysocki, O., Hoegner, L. and Stilla, U. Classifying point clouds at the facade-level using geometric features and deep learning networks, In: International 3D GeoInfo Conference 2023, Recent Advances in 3D Geoinformation Science, 391-404. Cham: Springer Nature Switzerland, 2023, https://doi.org/10.1007/978-3-031-43699-4\_2.
- Schwarz, S., Pilz, T., **Wysocki, O.**, Hoegner, L. and Stilla, U. Transferring facade labels between point clouds with semantic octrees while considering change detection, *In: International 3D GeoInfo Conference 2023, Recent Advances in 3D Geoinformation Science, 287-298. Cham: Springer Nature Switzerland, 2023, https://doi.org/10.1007/978-3-031-43699-4\_17.*
- 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