

Report on experiences in the Laser Scanning Workshop at the Geospatial Week 2019 in Enschede

August 2019

I applied for the TIF Travel Grant to participate in the 11th (my first!) Laser Scanning Workshop for the opportunity to present work from my PhD project on *Autonomous 3D Earth Observation of Dynamic Landscapes* (www.uni-heidelberg.de/auto3Dscapes). The full paper on “High-Frequency 3D Geomorphic Observation Using Hourly Terrestrial Laser Scanning Data Of A Sandy Beach” is the first publication from my research and therefore an important milestone for me.



Presentation of my work on high-frequency geomorphic 3D observation



Photo of co-authors receiving the Best Paper Award in the Laser Scanning Workshop from Chair Jan Böhm. Persons from left to right: Bernhard Höfle, Jan Böhm, Ashutosh Kumar, Lukas Winiwarter, Katharina Anders.

The Geospatial Week was the unique opportunity not only to share my results and research idea with the community but also to meet and get into personal discussions with many people from the field – whom I only knew by name from publications before. For my PhD research on 3D geospatial data analysis, the ISPRS Geospatial Week is a core event, convening the most relevant working groups and scientists whose work is related to these.

It was further a good setting to get into exchange with other doctoral students, by attending different presentations and often finding common methodological interests in spite of very different fields of research focus. Therefore, I enjoyed the variety of sessions and, besides the focused research presentations, also the keynotes gave interesting insights on key topics in different fields, such as large 3D point cloud data (Prof. Peter van Oosterom) and observation of the cryosphere (Prof. Ramon Hanssen).

The surprising highlight: I had contributed to a joint paper with my supervisor Prof. Bernhard Höfle and my PhD fellow to research that was conducted by an intern in our group in the summer of 2018. This paper won the *Best Paper Award* of the Laser Scanning Workshop – the photo on the right shows us after being awarded by Jan Böhm.

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GSW2019 Contributions in the ISPRS Annals of Photogrammetry, Remote Sensing, and Spatial Information Science:

Anders, K., Lindenbergh, R. C., Vos, S. E., Mara, H., de Vries, S., and Höfle, B. (2019). HIGH-FREQUENCY 3D GEOMORPHIC OBSERVATION USING HOURLY TERRESTRIAL LASER SCANNING DATA OF A SANDY BEACH, ISPRS Ann. Photogramm. Remote Sens. Spatial Inf. Sci., IV-2/W5, 317-324, DOI: 10.5194/isprs-annals-IV-2-W5-317-2019

Kumar, A., Anders, K., Winiwarter, L., and Höfle, B. (2019). FEATURE RELEVANCE ANALYSIS FOR 3D POINT CLOUD CLASSIFICATION USING DEEP LEARNING, ISPRS Ann. Photogramm. Remote Sens. Spatial Inf. Sci., IV-2/W5, 373-380, DOI: 10.5194/isprs-annals-IV-2-W5-373-2019