Preface: Workshop "Semantics3D - Semantic Scene Analysis and 3D Reconstruction from Images and Image Sequences"

Franz Rottensteiner[1], Norbert Haala[2], Michael Ying Yang[3]

[1]Leibniz University Hannover, Germany
[2]University of Stuttgart, Germany
[3]University of Twente, The Netherlands

Automated 3D reconstruction and extraction of semantic information from images and image sequences are important topics of research in Photogrammetry, Remote Sensing, GIS, and Computer Vision. This workshop is a follow-up to the first event under the same name embedded in the ISPRS Geospatial Week 2019 in Enschede. It addressed researchers and practitioners from universities, research institutes, industry, governmental organizations, and private companies. The range of topics covered by the workshop was reflected by the terms of reference of the cooperating ISPRS working groups:

- WG II/2 Point cloud acquisition and processing
- WG II/3 3D scene reconstruction for modeling & mapping
- WG II/4 AI / ML for geospatial data
- WG II/5 Temporal geospatial data understanding

Prospective authors were invited to submit full papers of a maximum length of 10 pages. In addition, authors of application-oriented work could submit extended abstracts. The organizing committee received 11 full papers for review. The submitted full papers were subjected to a rigorous double blind peer review process. Based on the reviews, 7 papers were accepted for publication in the ISPRS Annals. This number corresponds to an acceptance rate of 63%. Each full paper was reviewed by a minimum of two members of the scientific committee, while most of them by three.

In addition, we received 9 extended abstracts for review. The abstracts were also reviewed by at least two members of the scientific committee, and the authors of all abstracts were invited to submit full papers to the workshop. We received 6 full papers based on these selected abstracts. Along with three papers that did not pass the full paper peer review, they were published in the International Archives of the Photogrammetry, Remote Sensing and Spatial Information Science.

All accepted papers were presented at the workshop in one of four oral sessions. The **Program Committee** consisted of the following persons:

- Ksenia Bittner, German Aerospace Center(DLR), Germany
- Jan Böhm, University College London, UK
- Max Coenen, Leibniz Universität Hannover, Germany
- Pablo d'Angelo, German Aerospace Center (DLR), Germany
- Friedrich Fraundorfer, Graz University of Technology, Austria
- Markus Gerke, Technische Universität Braunschweig, Germany
- Norbert Haala, University of Stuttgart, Germany
- Dorota Iwanszczuk, TU Darmstadt, Germany
- Jinha Jung, Purdue University, USA
- Arpan Kusari, University of Michigan, USA
- Florent Lafarge, INRIA, Sophia Antipolis, France
- Loic Landrieu, National Geographical Institute, France
- Max Mehltretter, Leibniz Universität Hannover, Germany
- Sander Oude Elberink, University of Twente, The Netherlands
- Charlotte Pelletier, University of Southern Brittany, France
- Ribana Roscher, University of Bonn, Germany
- Franz Rottensteiner, Leibniz Universität Hannover, Germany
- Marc Russwurm, Federal Institute of Technology (EPFL), Lausanne, Switzerland
- Jie Shan, Purdue University, USA
- Bruno Vallet, Institut Géographique National (IGN), France

- Martin Weinmann, Karlsruhe Institute of Technology, Germany
- Wen Xiao, China University of Geosciences, China
- Bisheng Yang, Wuhan University, China
- Michael Ying Yang, University of Twente, The Netherlands

The editors wish to thank all contributing authors and the members of the Program Committee. In addition, we like to express our thanks to the ISPRS Geospatial Week, without whom this event could not have taken place.

Editors:
Franz Rottensteiner, Leibniz University Hannover, Germany
Norbert Haala, University of Stuttgart, Germany
Michael Ying Yang, University of Twente,The Netherlands

Responsible Technical Commissions/ involved Working Groups:
WG II/2 Point cloud acquisition and processing
WG II/3 3D scene reconstruction for modeling & mapping
WG II/4 AI / ML for geospatial data
WG II/5 Temporal geospatial data understanding