ISPRS events "Photogrammetric Image Analysis" and "High Resolution Earth Imaging for Geospatial Information"

The two well-known ISPRS events "Photogrammetric Image Analysis" (PIA) and "High Resolution Earth Imaging for Geospatial Information" (HRIGI, also known as the ISPRS-Hannover Workshop) were jointly held for the first time at Technische Universität München (TUM), Munich, March 25 through 27 with great success and an effective collaboration (see Figure 1). The conference chairs were Uwe Stilla from TUM, Germany, and Christian Heipke from Leibniz Universität Hannover, Germany.



Fig. 1: UAV image of PIA15+HRIGI15 conference participants.

First and foremost, holding the PIA in conjunction with the ISPRS-Hannover Workshop was a win-win for PIA and HRIGI attendees and for ISPRS as a whole. For the very first time, the participants of both meetings were able to appreciate the success of partnership of two influential topics, "semantics" and "geometry", which were largely covered individually in previous events by PIA and HRIGI, respectively. The ISPRS working groups cooperating in the joint event were "LiDAR, SAR and Optical Sensors for Airborne and Spaceborne Platforms" (WG I/2), "Geometric and Radiometric Modeling of Optical Airborne and Spaceborne Sensors" (WG I/4), "Orientation and Surface Reconstruction" (WG III/1), "3D Scene Analysis" (WG III/4), "Methods for the Update and Verification of Geospatial Databases" (WG IV/1), "DEM Generation and Surface Deformation Monitoring from SAR Data" (WG VII/2), and "Pattern Analysis in Remote Sensing" (ICWG III/VII). The interest of working groups from four ISPRS commissions, I, III, IV, and VII, gave a chance to cover a broad range of topics including sensors and platforms, photogrammetric image exploitation, geospatial databases, and SAR image processing.

The PIA and HRIGI joint conference welcomed a total of 184 attendees from 28 countries. The event introduced many innovative and fresh ideas during the conference program, and it was possible to select from two types of contributions: "double blind reviewed papers" and "abstract reviewed papers". The meeting featured two key note speakers: the first speaker, Tomas Pajdla from Czech Technical University in Prague, gave a keynote entitled "Solving Minimal Problems For 3D Reconstruction From Images" (see Figure 2a), and the second speaker, Richard Bamler from German Aerospace Center (DLR), gave a talk entitled "TerraSAR-X, TanDEM-X and Beyond" (see Figure 2b). Besides, the event offered 34 oral presentations and 49 interactive presentations. The topics of the oral sessions



Fig. 2: Keynote speakers: a) Tomas Pajdla, b) Richard Bamler.

were "Conditional Random Fields", "Terrestrial", "Forest Monitoring", "Geometry", "Synthetic Aperture Radar", "Digital Elevation Models", "Image Analysis", and "Buildings". Also, a master class on photogrammetric and bathymetric LiDAR data processing was part of the programme. As common for both PIA and HRIGI, there were no parallel programs offered during the interactive (poster) presentations, and this gave a nice opportunity for detailed one-to-one discussions with the authors in three poster sessions.

All accepted papers were published electronically with an individual persistent Digital Object Identifier (DOI). The Annals (<u>http://www.isprs-ann-photogramm-remote-sens-spatial-inf-sci.net/II-3-W4/index.html</u>) and the Archives (<u>http://www.int-arch-photogramm-remote-sens-spatial-inf-sci.net/XL-3-W2/index.html</u>) are freely available via the ISPRS web page. All papers were submitted to Thomson Reuters' for inclusion into the Conference Citation Proceedings Index (CPCI), one of the indices of the Web of Science, and are also listed in SCOPUS and Google Scholar.

The workshop was officially opened by Uwe Stilla and Christian Heipke with warm messages, where 9 travel grants provided by TIF - The ISPRS Foundation - was also awarded during the opening session (see Figure 3a). The best paper award was given to the contribution entitled "Semantic Segmentation of Aerial Images in Urban Areas with Class-Specific Higher-Order Cliques" with authors Javier A. Montoya-Zegarra, Jan Dirk Wegner, Ľubor Ladický, and Konrad Schindler, all from Swiss Federal Institute of Technology, ETH. The best poster award went to the poster entitled "Robust Sparse Matching and Motion Estimation using Genetic Algorithms" by Mozhdeh Shahbazi, Gunho Sohn, Jérôme Théau, and Patrick Ménard from three different geomatics institutions from Canada (see Figure 3b).



Fig. 3: a) Christian Heipke (5th on the left), Uwe Stilla (1st on the right), and the winners of the travel grants provided by TIF - The ISPRS Foundation, b) the best poster award, Gunho Sohn (centre).

Two social events were organized during the conference. On the first night attendees met at *Vorhoelzer Forum*, a part of TUM, where a very well-organized Ice Breaker party took place on the roof top. The second night saw the conference dinner at the *Münchner Künstlerhaus*, located in downtown Munich, a place originally conceived as a place where artists could meet Munich society (see Figure 4). This event and the excellent dinner were supported by Hexagon, which was also the organizer of the "MasterClass" session performed on March, 26th.



(a) (b) Fig. 4: a) Alphorn blower and b) dinner at *Münchner Künstlerhaus*.

The author greatly appreciates the organization and services made by the local organizers. Many thanks go to two conference chairs, Uwe Stilla and Christian Heipke, the two local organizing committee chairs, Ludwig Hoegner and Uwe Breitkopf, and the members and assistants for a tremendous organization. The conference provided exceptional opportunities for researchers and practitioners to discuss new research ideas and innovative technologies, and also proved the importance of collaboration in terms of both national and international levels. We hope to meet again in Munich and/or Hannover soon.

Ali Özgün OK, Geodesy and Photogrammetry Engineering Faculty of Engineering and Architecture Nevsehir H.B.V. University, **Turkey**