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# PIA07

## Photogrammetric Image Analysis

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### Part A

Papers accepted on the basis of peer-reviewed full manuscripts

#### Editors

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ISPRS WG I/2 – SAR and LIDAR Systems  
ISPRS WG III/2 – Surface Reconstruction  
ISPRS WG III/4 – Automatic Image Interpretation for City-Modelling  
ISPRS WG III/5 – Road Extraction and Traffic Monitoring  
ISPRS WG IV/3 – Automated Geo-Spatial Data Acquisition and Mapping

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- WG I/2 – SAR and LIDAR Systems
- WG III/2 – Surface Reconstruction
- WG III/4 – Automatic Image Interpretation for City-Modelling
- WG III/5 – Road Extraction and Traffic Monitoring
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# Preface

Automated extraction of topographic objects from remotely sensed data is an important topic of research in Photogrammetry, Remote Sensing, GIS, and Computer Vision. This joint conference of ISPRS working groups I/2, III/2, III/4, III/5, and IV/3, held at Technische Universitaet Muenchen (TUM), discussed recent developments, the potential of various data sources, and future trends both with respect to sensors and processing techniques in automatic object extraction. The focus of the conference lay on methodological research.

The conference addressed researchers and practitioners from universities, research institutes, industry, government organizations, and private companies. The range of topics covered by the conference is reflected by the cooperating ISPRS working groups:

- SAR and LIDAR Systems (WG I/2)
- Surface Reconstruction (WG III/2)
- Automatic Image Interpretation for City-Modelling (WG III/4)
- Road Extraction and Traffic Monitoring (WG III/5)
- Automated Geo-Spatial Data Acquisition and Mapping (WG IV/3)

Prospective authors were invited to submit a full paper of maximum 6 pages and we received 49 papers for review. The presented papers have undergone a rigorous "double blind" review process of full papers, with a rejection rate of 30%. Each paper was reviewed at least by three members of the program committee. Accepted papers (34) and one invited paper are published as printed proceedings in the IAPRS series as well as on CD labelled as "Part A". Only a subset of these papers could be presented orally due to the single track design of PIA07 and the generous time slots for intensive discussion.

Authors who intended to present application oriented work that was in particular suitable for interactive presentation were invited to submit an extended abstract. A group of the program committee selected 32 out of 55 contributions for presentation. Accepted contributions based on abstract review were invited to submit full papers which are published on CD labelled as "Part B".

In total, we received contributions from authors coming from 26 countries. The proceedings include 66 papers from authors coming from 19 countries. There were 7 oral sessions with altogether 20 papers and two interactive sessions where 46 papers were presented.

Finally, 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 Local Organising Committee, without whom this event could not have taken place. Konrad Eder and Christine Elmauer did a great job in arranging the event. Ludwig Hoegner was very helpful especially with the management of the ConfTool. The final word processing of all incoming manuscripts and the preparation of the CD by Dominik Lenhart is gratefully acknowledged. Jens Leitloff organised the internet connection during the PIA07 event.

Munich, August 2007

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