

INTRODUCTION

The workshop *Towards Benchmarking Automated Calibration, Orientation and Surface Reconstruction from Images* (BenCOS) of the *International Society for Photogrammetry and Remote Sensing* (ISPRS) in conjunction with the 10th *IEEE International Conference on Computer Vision* (ICCV 2005) focuses on automatic methods for surface reconstruction from images, multi-view stereo, camera (self-) calibration, motion estimation and related topics.

One major aim of the new commission III on *Photogrammetric Computer Vision and Image Analysis* is to bring together researchers from the related fields, and let them benefit from mutual experience. The working groups *Automatic Calibration and Orientation of Optical Cameras* and *Surface Reconstruction* are co-chaired by researchers from the computer vision and photogrammetry communities.

Apart from being a forum for discussing new scientific results, the major goal of these working groups is to establish true benchmarks for the performance evaluation of proposed methods. We believe this is a highly important aspect of scientific research; it allows an objective comparison of different approaches, catalyzes new developments, and eases the access of potential commercial users to these research areas and communities. The motivation for this workshop is thus threefold:

- communication of new scientific results in the related areas,
- bringing together researchers from different communities, and
- working towards the definition of benchmarks.

We received 17 contributions of which we were able to accept 10 as oral presentations. Reviewing was carried out in a double-blind process by leading international researchers of the computer vision and photogrammetry areas. Each full paper has been reviewed by 3 members of the program committee.

We hope that all workshop participants will leave Beijing with the most rewarding memories in the scientific, technical and social aspects, and that those unable to attend will find the proceedings a valuable source of information.

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