



3D Mapping, Modeling and Surface Reconstruction

**A Special Track of the
8th International Symposium on Visual Computing (ISVC'12)**

<http://www.isvc.net>

July 16-18, 2012, Crete, Greece

Scope:

Three dimensional mapping, modeling and surface recognition from calibrated and uncalibrated images is an active field with many applications in human computer interaction, autonomous navigation, and surveillance. More recently, these discoveries have received particular interest in space exploration where advances in 3D computer vision are revolutionizing the field of planetary mapping by automating time-consuming, manually intensive data processing techniques. As such, advances in computer vision are the key to unlocking the full potential of terabytes of raw imagery that is being collected by orbiting and landed robotic missions. As NASA and other space agencies direct their attention toward human landing on the Moon and continued robotic exploration of Mars, planetary mapping and modeling plays a pivotal role in astronaut training, landing site selection, and robot navigation. The purpose of this track is to advance the current state of the art of 3D mapping, modeling and surface reconstruction and its wide range of applications.

Topics:

The topics of interest include but are not limited to the following areas:

- Stereo image processing
- Surface characterization
- Bundle adjustment
- Robust estimation methods
- Photoclinometry and photometric stereo reconstruction
- Statistical methods for 3D vision
- Surface reconstruction from uncalibrated images
- Multi-modal image reconstruction
- Camera calibration

Paper Submission Procedure:

Papers submitted to ISVC 2012 Special Track must not have been previously published and must not be currently under consideration for publication elsewhere. Manuscripts should be submitted in camera-ready format and should not exceed **12 pages**, including figures and tables (see <http://www.isvc.net> for details). All papers accepted will appear in the symposium proceedings which will be published by **Springer-Verlag** in the **Lecture Notes in Computer Science (LNCS)** series.



Important Dates:

Paper submissions	May 7, 2012 (Extended)
Notification of acceptance	June 4, 2012
Final camera ready paper	June 18, 2012
Advance Registration	June 18, 2012
ISVC'12 Symposium	July 16-18, 2012

Organizers:

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