

# MVR3D 2017

# Multiview Relationships in 3D Data

# OCTOBER, 29, 2017 - VENICE / ITALY



# **CALL FOR PAPERS**

#### **Focus**

The recent improvements in the 3D sensing technologies have caused a remarkable amplification in the utilization of 3D data. Common flexible representations governing the data in many applications are point clouds. Therefore, researchers are now taking on the challenge of accurately autostitching tens of millions of unstructured/structured points that include symmetries, self-similarities and that do not admit scan-order constraints. MVR3D will be dedicated to gather together industry experts, academic researchers, and practitioners of 3D data acquisition and scene reconstruction into a lively environment for discussing methodologies and challenges raised by the emergence of large-scale 3D reconstruction applications.

## **Topics**

The goal of this workshop is to push the frontier in the area of global multi-scan alignment. Focal points for discussions and solicited submissions include but are not limited to:

- Multiview registration using scene priors
- Global point cloud alignment
- > Learning methods for correspondence estimation
- > 3D Object reconstruction from multiple views
- Joint registration and segmentation of multiple scans
- ➤ Joint matching of multiple non-rigid surfaces
- Multiview object detection
- Multi-object Instance reconstruction
- Feature descriptors for multiview 3D matching
- Multiview pose estimation
- > Joint processing of multiple point clouds
- Pose averaging and error diffusion on graphs
- Multiview stitching of 3D scans on mobile and embedded devices
- Practical applications of multiple scan registration on large scale settings
- Datasets and methods for ground truth acquisition

#### **Awards**

Besides monetary prize, the awards for the **best contribution(s)** will include an Intel RealSense camera and 3D Flow Zephyr Pro software. **Authors of all accepted papers** will receive 3D Flow Zephyr Light software license.

#### **Dates**

Paper submission:

July 24, 2017

Notification of acceptance:

August 18, 2017 August 23, 2017

Camera ready:Workshop date:

October 29, 2017

#### Submission

We are looking forward to submissions, following the enlisted guidelines:

- > Submitted papers should not have been published, accepted or under review elsewhere.
- ➤ The submissions can be up to 8 pages (excluding references).
- All the papers must be submitted using the templates provided on our webpages.
- ➤ All the submissions will be subject to double-blind review process. Therefore author names, affiliations, emails, personal acknowledgements, etc. should be removed from the paper.
- ➤ Every accepted paper requires that at least one author has a workshop-inclusive ICCV registration.
- > Here are further detailed guidelines.

## **Speakers**

Our invited speakers come from top research institutions and companies around the globe, and are leading figures in the topics covered by the workshop:

Andrew Fitzgibbon, Alex Bronstein, Vladlen Koltun, Radu Horaud, Andreas Nüchter, Konrad Schindler, Christopher Zach and Luc Robert

## Organizing Committee

Tolga Birdal, Emanuele Rodola, Gul Varol, Slobodan Ilic, Andrea Torsello, Umberto Castellani

#### Venue

In conjunction with **ICCV 2017**, held in: Lungomare Guglielmo Marconi, 30, 30126 Lido di Venezia - Italy

#### Contact

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