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 auto-stitching 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.