Eurographics Workshop on 3D Object Retrieval 2012



Cagliari (Italy), May 13, 2012

3D Object Retrieval Workshop Series

3D object representations have become an integral part of modern computer graphics applications, such as computer-aided design, game development and film production. At the same time, 3D data have become very common in various domains such as computer vision, computational geometry, molecular biology and medicine.

Indeed, the rapid evolution in graphics hardware and software, in particular the availability of low cost 3D scanners and modeling tools, has greatly facilitated 3D model acquisition, creation, and manipulation, giving the opportunity to a large user community to experience applications using 3D models. As the number of 3D models is growing rapidly, the problem of creating new 3D models has shifted to the problem of searching for existing 3D models. Thereupon, the development of efficient search mechanisms is required for the effective retrieval of 3D objects from large repositories.

The aim of the 3DOR Workshop series is to stimulate researchers from different fields such as Computer Vision, Computer Graphics, Machine Learning and Human-Computer Interaction who work on the common goal of 3D object retrieval, to present state-of-the-art work in the field. This will provide a cross-fertilization ground that will stimulate discussions on the next steps in this important research area. 3DOR 2012 will take place, as the fifth workshop in this series, on May 13, 2012, as a co-event of the 33rd Annual Conference of the European Association for Computer Graphics (Eurographics 2012).

Call for Papers, Posters and System Demonstrations

Authors are invited to submit original and unpublished research and practical applications in all areas of 3D Object Retrieval. Submissions are invited in form of full and short papers, as well as poster and system presentations. Suggested topics include, but are not limited to:

- 3D object similarity and matching
- 3D object classification, indexing, and mining
- Similarity of non-rigid shapes
- Feature extraction, decomposition, and segmentation
- Multi-level representations for matching and retrieval
- Partial, part-in-whole, and many-to-many matching
- Matching under uncertainty and noise
- Semantics-driven 3D object retrieval and classification
- · Sketch-based retrieval
- Query interfaces and search modalities
- Benchmarking issues
- Relevance feedback methods
- Active learning
- Generative/discriminative approaches in 3D object categorization
- Applications in multimedia, CAD, games, biometrics, e-science, e-learning, medicine, biology, and cultural heritage.

This year's workshop will also feature the Seventh Shape Retrieval Evaluation Contest (SHREC'2012). A separate call for participation will be issued later on.

Extended versions of selected papers from the Workshop will appear, after a further review, in special issues of international journals. Selected papers from previous workshops appeared in special issues of the Visual Computer (TVC) journal and the International Journal of Computer Vision (IJCV) published by Springer.

Workshop Organization

Chairs

Michela Spagnuolo IMATI CNR Genoa, Italy

Michael Bronstein University of Lugano, Switzerland

Programme Chairs

Alexander Bronstein Tel-Aviv University, Israel

Alfredo Ferreira

IST/Technical University of Lisbon, Portugal

Important dates

January 20, 2012: Submissions due

February 13, 2012: Notification of acceptance **February 23, 2012:** Camera-ready papers

May 13, 2012: Workshop takes place

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