The best paper will be invited to submit a full journal version of the paper to *Computers & Graphics (Elsevier)*. The proceedings of each workshop will also be included in the *ACM Digital Library*.

==========

Call for Papers:

The importance of making computers understand the scene presented to them cannot be understated. The ability to automatically infer the semantics and geometry of any given scene would enable a variety of different applications in the field of Augmented reality, Robotics, Image Processing and Visualization. Understandably, a large amount of research effort has been directed at this problem in the computer vision and machine learning communities, with plenty of motivation and interest in computer graphics. The availability of commodity depth sensors have led to a number of breakthroughs to made in this space. Much of this success can be attributed to the use of computer graphics for generating realistic sensor data.

We believe the time is ripe for extending this promising approach to the more challenging problem of full scene understanding. However, to enable this, we need close collaboration between researchers from *machine learning, computer vision, and computer graphics*. This workshop is intended to bring researchers from these communities together.

We are soliciting original contributions which employ shape analysis and image processing for abstracting, representing, and manipulating raw depth scans of indoor environments. Specific topics include, but are not limited, to:

- Shape analysis
- Scene Classification + RGBD data analysis
- Modeling and recognition of scene-object interactions
- 3D Spatial Understanding from Images
- Physically Grounded Scene Interpretation
- Large-scale Data-driven approaches for shape collection analysis
- Understanding scenes from depth images and videos
- Interaction applications combining raw scenes with virtual objects
- Depth Datasets
- Computer Vision as Inverse Graphics

==========

**Important Dates:**

August 2, 2014: Paper submission deadline:
August 20, 2014: Notification of Acceptance
September 15, 2014: Camera-ready deadline

Please check [http://geometry.cs.ucl.ac.uk/workshops/IndoorSceneUnderstanding_sigga14](http://geometry.cs.ucl.ac.uk/workshops/IndoorSceneUnderstanding_sigga14) for updates.
Program committee

Gabriel J. Brostow, University College London
Peter Gehler, Max Planck Institut
Derek Hoiem, University of Illinois at Urbana-Champaign
Shi-Min Hu, Tsinghua University
Vladimir Kim, Stanford University
Ligang Liu, University of Science and Technology of China
Daniele Panozzo, ETH Zürich
Silvio Savarese, Stanford University
Nathan Silberman, New York University
Thorsten Thormaehlen, Philipps-Universität Marburg
WeiWei Xu, Microsoft Research Asia
Michael Wand, Utrecht University

Paper Submission:

The manuscripts should be submitted as PDF files and should be no more than 8-10 pages in Siggraph paper format. All submissions must be prepared according to the ACM SIGGRAPH publication guidelines. Each paper will be peer-reviewed by at least two reviewers. Acceptance will be based on relevance to the workshop, novelty, and technical quality. In submitting a manuscript to this workshop, the authors acknowledge that no paper substantially similar in content has been submitted to another workshop or conference during the review period.

The best paper will be invited to submit a full journal version of the paper to Computers & Graphics (Elsevier). The proceedings of each workshop will also be included in the ACM Digital Library.

All workshop research papers must be original, unpublished work, written and presented in English. All submissions must be prepared according to the ACM SIGGRAPH publication guidelines. At least one author of each accepted workshop paper is to register for SIGGRAPH Asia 2014 (full conference pass) by 15 September 2014, and give a presentation at the workshop. To recognize the contribution of workshop paper presenters, the presenters can apply for a 25% discount per accepted paper submission.

Program Co-Chairs:

Niloy J. Mitra, University College London
Pushmeet Kohli, Microsoft Research Cambridge
Shahram Izadi, Microsoft Research Cambridge
Casten Rother, TU Dresden