Call for Papers

Scattering: Acquisition, Modeling, and Rendering

For *IEEE Computer Graphics and Applications*' May/June 2013 issue

**NEW DEADLINE:
10 SEPTEMBER 2012**

~~Submissions due: 25 August 2012~~

Scattering plays a fundamental role in the physical world's appearance. It has important applications in many disciplines, from the increasing use of volumetric and atmospheric effects for games and films in the entertainment industry, to estimating weather conditions in meteorology, to predicting the visual appearance of skin and pigments for cosmetics. Modeling how light scatters with matter is essential in many scenarios—such as designing efficient participating media rendering algorithms, developing devices for acquiring volumetric phenomena, creating tools for authoring volumetric structures, and analyzing and editing foggy images.

We seek scientific contributions that cover all aspects of scattering in graphics, including both theory and practice, ranging from physically based or physically inspired methods to artistic tools and nonphotorealistic applications. Possible topics include but aren't limited to

- participating media modeling, rendering, or editing;
- subsurface scattering rendering (skin, milk, marble, hair, and so on);
- acquisition of scattering or translucent materials;
- fabrication of scattering or translucent objects and materials;
- estimation of weather conditions;
- vision in scattering media (for example, defogging images);
- volumetric and atmospheric effects in film and game production;
- scattering and participating media in other industries;
- computational photography approaches;
- relighting and precomputed radiance transfer;
- artistic tools and goal-driven volumetric design;
- volumetric effects as a storytelling tool;
- image-based participating media; and
- perception in participating media.

Submission Guidelines

Articles should be no more than eight magazine pages, where a page is 800 words and a quarter-page image counts as 200 words. Please cite only the 12 most relevant references, and consider providing technical background in sidebars for nonexpert readers. Color images are preferable and should be limited to 10. Visit the *CG&A* style and length guidelines at www.computer.org/portal/web/peerreview magazines/cga.

We also strongly encourage you to submit multimedia (videos, podcasts, and so on) to enhance your article. Visit *CG&A* supplemental guidelines at www.computer.org/portal/web/peerreviewmagazines/accga#supplemental.

Please submit your paper using the online manuscript submission service at https://mc.manuscriptcentral.com/cs-ieee. When uploading your paper, select the appropriate special-issue title under the category "Manuscript Type." Also, include complete contact information for all authors. If you have any questions about submitting your article, contact the peer review coordinator at cga-ma@computer.org.

Questions?

Please direct any correspondence before submission to the guest editors:

- Diego Gutierrez, diegog@unizar.es
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