

2022 | Volume 5, Issue 3

Proceedings of the ACM

*on Computer Graphics and
Interactive Techniques*



Association for
Computing Machinery

Advancing Computing as a Science & Profession

Proceedings of the ACM

on Computer Graphics and Interactive Techniques

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The proceedings of the ACM in Computer Graphics and Interactive Techniques (PACMCGIT) publishes original research of the highest quality dealing with all areas of computer graphics and interactive techniques including rendering, modeling, animation, and digital image processing as well as the visual computing and simulation elements of such disparate areas as computational fabrication, computational photography, physical modeling and control, user interfaces, video game techniques, and virtual and augmented reality. PACMCGIT broadly spans all of these areas as well as new areas that will develop under the wide umbrella of computer graphics and interactive techniques. The journal operates in close collaboration with the ACM special interest group on Computer GRAPHics and Interactive Techniques (ACM SIGGRAPH) with each issue devoted to a particular subject area within CGIT. All accepted papers receive two rounds of reviewing and authors can expect publication decisions within posted timelines.

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PACMCGIT (ISSN: 2577-6193) is published four times yearly by the Association for Computing Machinery (ACM), 1601 Broadway, 10th Floor, New York, NY 10019-7434



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Cover image from "Virtual Blue Noise Lighting," by Tianyu Li, Wenyou Wang, Daqi Lin, and Cem Yuksel, in this issue.



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Editor's Note

PACMCGIT is the premiere journal focused on Computer Graphics and Interactive Techniques (CGIT) in the collection of the Proceedings of the ACM (PACM). PACMCGIT's aim is to publish and disseminate research of the highest quality within broad definitions of the domains of computer graphics and interactive techniques.

This issue of PACMCGIT includes papers associated with the High Performance Graphics (HPG) conference, organized in July 2022. Due to restrictions placed by the COVID-19 pandemic, and a desire to simplify the organization efforts, the conference meeting was held virtually and streamed online, with a single keynote and reception held co-located with SIGGRAPH in Vancouver, Canada. All papers presented at the conference are included for publication in this PACMCGIT issue.

The issue presents twelve paper publications, with emphasis on a variety of topics, including geometry, texturing, sampling, acceleration structures, and graphics systems, among other exciting topics in computer graphics. These papers represent a mix of machine learning and more traditional graphics approaches to improve the state of the art in performance and image quality.

The papers included in this issue were carefully reviewed and selected using a double-blind peer-reviewing process, including a full second review cycle, by expert reviewers from the HPG international program committee and following PACMCGIT guidelines.

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