Ruifeng Liu(Ruifeng_Liu@student.uml.edu)

Journal Finder

1.ACM Transactions on Graphics (TOG)
Recent Issue:
Understanding and Exploiting Object Interaction Landscapes
@article{Pirk:2017:UEO:3087678.3083725,
 author = {Pirk, S\"{o}ren and Krs, Vojtech and Hu, Kaimo and Rajasekaran, Suren Deepak and Kang,
Hao and Yoshiyasu, Yusuke and Benes, Bedrich and Guibas, Leonidas J.},
 title = {Understanding and Exploiting Object Interaction Landscapes},
 journal = {ACM Trans. Graph.},
 issue_date = {June 2017},
 volume = {36},
 number = {3},
 month = jun,
 year = {2017},
 issn = {0730-0301},
 pages = {31:1--31:14},
 articleno = {31},
 numpages = {14},
 url = {http://doi.acm.org/10.1145/3083725},
 doi = {10.1145/3083725},
 acmid = {3083725},
 publisher = {ACM},
 address = {New York, NY, USA},
 keywords = {Object functionality analysis, affordance analysis, geometric modeling, object semantics,
physical interactions, shape analysis},
}

Old Issue:
Activity-centric scene synthesis for functional 3D scene modeling
@article{Fisher:2015:ASS:2816795.2818057,
 author = {Fisher, Matthew and Savva, Manolis and Li, Yangyan and Hanrahan, Pat and Nie\ssner,
Matthias},
 title = {Activity-centric Scene Synthesis for Functional 3D Scene Modeling},
 journal = {ACM Trans. Graph.},
 issue_date = {November 2015},
 volume = {34},
 number = {6},
 month = oct,
 year = {2015},
 issn = {0730-0301},
 pages = {179:1--179:13},
 articleno = {179},
 numpages = {13},
 url = {http://doi.acm.org/10.1145/2816795.2818057},
 doi = {10.1145/2816795.2818057},
 acmid = {2818057},

2.IEEE Transactions on Visualization and Computer Graphics (TVCG)
Recent Issue:
Visual Analysis of Cloud Computing Performance Using Behavioral Lines

Visual Analysis of the Air Pollution Problem in Hong Kong
Old Issue:

3.IEEE Computer Graphics and Applications (CG&A)
Recent Issue:
Enhancing the Gaming Experience Using 3D Spatial User Interface Technologies

title = {Enhancing the Gaming Experience Using 3D Spatial User Interface Technologies},
year = {2017},
volume = {37},
number = {3},
pages = {16-23},
keywords={Three-dimensional displays;Games;Stereo image processing;Two dimensional displays;User interfaces;Computer graphics;Human computer interaction},
doi = {10.1109/MCG.2017.42},
url = {doi.ieeecomputersociety.org/10.1109/MCG.2017.42},
ISSN = {0272-1716},
month={May-June}
}

Old Issue:
A Multitouchless Interface: Expanding User Interaction
@ARTICLE{6813977,
author = {P. Krejov and A. Gilbert and R. Bowden},
journal = {IEEE Computer Graphics and Applications},
title = {A Multitouchless Interface: Expanding User Interaction},
year = {2014},
volume = {34},
number = {3},
pages = {40-48},
keywords={User interfaces;Three-dimensional displays;Tracking;Haptic interfaces;Real-time systems},
doi = {10.1109/MCG.2014.44},
url = {doi.ieeecomputersociety.org/10.1109/MCG.2014.44},
ISSN = {0272-1716},
month={May-June}
}

4.ACM SIGGRAPH Computer Graphics (conference proceedings only, published as an ACM TOG issue)
Recent Issue:
Real-time Facial Animation with Image-based Dynamic Avatars
@article{Cao:2016:RFA:2897824.2925873,
 author = {Cao, Chen and Wu, Hongzhi and Weng, Yanlin and Shao, Tianjia and Zhou, Kun},
 title = {Real-time Facial Animation with Image-based Dynamic Avatars},
 journal = {ACM Trans. Graph.},
 issue_date = {July 2016},
 volume = {35},
 number = {4},
 month = jul,
 year = {2016},
 issn = {0730-0301},
 pages = {126:1--126:12},
 articleno = {126},
 numpages = {12},
 url = {http://doi.acm.org/10.1145/2897824.2925873},

 doi = {10.1145/2897824.2925873},
 acmid = {2925873},
 publisher = {ACM},
 address = {New York, NY, USA},
 keywords = {face tracking, facial animation, hair modeling, image-based rendering, virtual avatar},
}

Old Issue:
Floating scale surface reconstruction
@article{Fuhrmann:2014:FSS:2601097.2601163,
 author = {Fuhrmann, Simon and Goesele, Michael},
 title = {Floating Scale Surface Reconstruction},
 journal = {ACM Trans. Graph.},
 issue_date = {July 2014},
 volume = {33},
 number = {4},
 month = jul,
 year = {2014},
 issn = {0730-0301},
 pages = {46:1--46:11},
 articleno = {46},
 numpages = {11},
 url = {http://doi.acm.org/10.1145/2601097.2601163},
 doi = {10.1145/2601097.2601163},
 acmid = {2601163},
 publisher = {ACM},
 address = {New York, NY, USA},
 keywords = {surface reconstruction},
}

5.Computers and Graphics (C&G)
Recent Issue:
Real-time GIS-based snow cover approximation and rendering for large terrains
@article{NEUKOM201814,
title = "Real-time GIS-based snow cover approximation and rendering for large terrains",
journal = "Computers & Graphics",
volume = "71",
pages = "14 - 22",
year = "2018",
issn = "0097-8493",
doi = "https://doi.org/10.1016/j.cag.2017.10.003",
url = "http://www.sciencedirect.com/science/article/pii/S0097849317301693",
author = "Benjamin Neukom and Stefan Müller Arisona and Simon Schubiger",
keywords = "Real-time visualization, Snow approximation, GIS, GPGPU, Game engine"
}

Old Issue:
Automatic flexible face replacement with no auxiliary data

@article{QIAN201464,
title = "Automatic flexible face replacement with no auxiliary data",
journal = "Computers & Graphics",
volume = "45",
pages = "64 - 74",
year = "2014",
issn = "0097-8493",
doi = "https://doi.org/10.1016/j.cag.2014.08.001",
url = "http://www.sciencedirect.com/science/article/pii/S0097849314000752",
author = "Kanglai Qian and Bin Wang and Huarong Chen",
keywords = "Image composition, Image enhancement, Face replacement"
}

6.Computer graphics forum
Recent Issue:
Nested Tracking Graphs

@article{12391010420170601,
Abstract = {Tracking graphs are a well established tool in topological analysis to visualize the evolution of components and their properties over time, i.e., when components appear, disappear, merge, and split. However, tracking graphs are limited to a single level threshold and the graphs may vary substantially even under small changes to the threshold. To examine the evolution of features for varying levels, users have to compare multiple tracking graphs without a direct visual link between them. We propose a novel, interactive, nested graph visualization based on the fact that the tracked superlevel set components for different levels are related to each other through their nesting hierarchy. This approach allows us to set multiple tracking graphs in context to each other and enables users to effectively follow the evolution of components for different levels simultaneously. We demonstrate the effectiveness of our approach on datasets from finite pointset methods, computational fluid dynamics},
Author = {Lukasczyk, Jonas and Weber, Gunther and Maciejewski, Ross and Garth, Christoph and Leitte, Heike},
ISSN = {01677055},
Journal = {Computer Graphics Forum},
Keywords = {TOPOLOGY, DATA analysis software, SCALAR field theory, REPRESENTATIONS of graphs, FLUID dynamics, Categories and Subject Descriptors (according to ACM CCS), Data [Computer Graphics]: Data Structures-Graphs and Networks},
Number = {3},
Pages = {12 - 22},
Title = {Nested Tracking Graphs.},
Volume = {36},
URL = {https://umasslowell.idm.oclc.org/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=123910104&site=ehost-live},
Year = {2017},
}

Old Issue:
Perfopticon: Visual Query Analysis for Distributed Databases

@article{10844226420150601,
Abstract = {Distributed database performance is often unpredictable due to issues such as system complexity, network congestion, or imbalanced data distribution. These issues are difficult for users to

assess in part due to the opaque mapping between declaratively specified queries and actual physical execution plans. Database developers currently must expend significant time and effort scanning log files to isolate and debug the root causes of performance issues. In response, we present Perfopticon, an interactive query profiling tool that enables rapid insight into common problems such as performance bottlenecks and data skew. Perfopticon combines interactive visualizations of (1) query plans, (2) overall query execution, (3) data flow among servers, and (4) execution traces. These views coordinate multiple levels of abstraction to enable detection, isolation, and understanding of performance issues. We evaluate our design choices through engagements with system developers, scientists, and stud},
Author = {Moritz, Dominik and Halperin, Daniel and Howe, Bill and Heer, Jeffrey},
ISSN = {01677055},
Journal = {Computer Graphics Forum},
Keywords = {DATA acquisition systems, INFORMATION visualization, QUERYING (Computer science), DISTRIBUTED databases, DATA flow computing, DATABASE design},
Number = {3},
Pages = {71 - 80},
Title = {Perfopticon: Visual Query Analysis for Distributed Databases.},
Volume = {34},
URL = {https://umasslowell.idm.oclc.org/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=108442264&site=ehost-live},
Year = {2015},
}

7.Visual Computer
Recent Issue:
Interactive GPU-based generation of solvent-excluded surfaces
@Article{Hermosilla2017,
author="Hermosilla, Pedro
and Krone, Michael
and Guallar, Victor
and V{\'a}zquez, Pere-Pau
and Vinacua, {\`A}lvar
and Ropinski, Timo",
title="Interactive GPU-based generation of solvent-excluded surfaces",
journal="The Visual Computer",
year="2017",
month="Jun",
day="01",
volume="33",
number="6",
pages="869--881",
abstract="The solvent-excluded surface (SES) is a popular molecular representation that gives the boundary of the molecular volume with respect to a specific solvent. SESs depict which areas of a molecule are accessible by a specific solvent, which is represented as a spherical probe. Despite the popularity of SESs, their generation is still a compute-intensive process, which is often performed in a preprocessing stage prior to the actual rendering (except for small models). For dynamic data or varying probe radii, however, such a preprocessing is not feasible as it prevents interactive visual analysis. Thus, we present a novel approach for the on-the-fly generation of SESs, a highly parallelizable, grid-based algorithm where the SES is rendered using ray-marching. By exploiting

modern GPUs, we are able to rapidly generate SESs directly within the mapping stage of the visualization pipeline. Our algorithm can be applied to large time-varying molecules and is scalable, as it can progressively refine the SES if GPU capabilities are insufficient. In this paper, we show how our algorithm is realized and how smooth transitions are achieved during progressive refinement. We further show visual results obtained from real-world data and discuss the performance obtained, which improves upon previous techniques in both the size of the molecules that can be handled and the resulting frame rate.",
issn="1432-2315",
doi="10.1007/s00371-017-1397-2",
url="https://doi.org/10.1007/s00371-017-1397-2"
}

Old Issue:
Ray tracing via GPU rasterization
@Article{Hu2014,
author="Hu, Wei
and Huang, Yangyu
and Zhang, Fan
and Yuan, Guodong
and Li, Wei",
title="Ray tracing via GPU rasterization",
journal="The Visual Computer",
year="2014",
month="Jun",
day="01",
volume="30",
number="6",
pages="697--706",
abstract="Ray tracing is a dominant method for generating a wide variety of global illumination effects, such as reflections/refractions, shadows, etc. In this paper, we propose an efficient technique to perform nearly accurate ray tracing using the programmable graphics processor units (GPUs). With the aid of the linked-list A-buffer and the uniform voxel grid to represent scene geometry, the ray-scene intersection can be efficiently computed via the built-in rasterization on GPUs. Based on this novel ray-scene intersection technique, a new ray-tracing framework which supports various light transport algorithms is introduced, including Ray Casting, Whitted Ray tracing, Ambient Occlusion, Path Tracing, and so on. The experimental results demonstrate the accuracy and efficiency of our approach.",
issn="1432-2315",
doi="10.1007/s00371-014-0968-8",
url="https://doi.org/10.1007/s00371-014-0968-8"
}