

SOURCE: ACM *Transactions on Graphics* (TOG)***1. Interactive Relighting in Single Low-Dynamic Range Images*****BibTeX**

```
@article{Wu:2017:IRS:3068851.3034185,
  author = {Wu, Jung-Hsuan and Saito, Suguru},
  title = {Interactive Relighting in Single Low-Dynamic Range Images},
  journal = {ACM Trans. Graph.},
  issue_date = {April 2017},
  volume = {36},
  number = {2},
  month = apr,
  year = {2017},
  issn = {0730-0301},
  pages = {18:1--18:18},
  articleno = {18},
  numpages = {18},
  url = {http://doi.acm.org.umasslowell.idm.oclc.org/10.1145/3034185},
  doi = {10.1145/3034185},
  acmid = {3034185},
  publisher = {ACM},
  address = {New York, NY, USA},
  keywords = {Image-based relighting, image-based modeling},
}
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ACM Ref

Jung-Hsuan Wu and Suguru Saito. 2017. Interactive Relighting in Single Low-Dynamic Range Images. ACM Trans. Graph. 36, 2, Article 18 (April 2017), 18 pages. DOI: <https://doi.org.umasslowell.idm.oclc.org/10.1145/3034185>

2. Meshed atlases for real-time procedural solid texturing**BibTeX**

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@article{Carr:2002:MAR:508357.508360,
  author = {Carr, Nathan A. and Hart, John C.},
  title = {Meshed Atlases for Real-time Procedural Solid Texturing},
  journal = {ACM Trans. Graph.},
  issue_date = {April 2002},
  volume = {21},
```

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number = {2},
month = apr,
year = {2002},
issn = {0730-0301},
pages = {106--131},
numpages = {26},
url = {http://doi.acm.org.umasslowell.idm.oclc.org/10.1145/508357.508360},
doi = {10.1145/508357.508360},
acmid = {508360},
publisher = {ACM},
address = {New York, NY, USA},
keywords = {MIP-map, Mesh partitioning, procedural texturing, solid texturing, texture atlas, texture mapping},
}
```

ACM Ref

Nathan A. Carr and John C. Hart. 2002. Meshed atlases for real-time procedural solid texturing. ACM Trans. Graph. 21, 2 (April 2002), 106-131.

DOI=<http://dx.doi.org.umasslowell.idm.oclc.org/10.1145/508357.508360>

SOURCE: IEEE Transactions on Visualization and Computer Graphics (TVCG)

1. Altering User Movement Behaviour in Virtual Environments

BibTeX

```
@ARTICLE{7835276,
author={A. L. Simeone and I. Mavridou and W. Powell},
journal={IEEE Transactions on Visualization and Computer Graphics},
title={Altering User Movement Behaviour in Virtual Environments},
year={2017},
volume={23},
number={4},
pages={1312-1321},
keywords={user interfaces;virtual reality;aesthetic discrepancies;immersive virtual reality systems;physical environment;user movement behaviour;virtual environments;virtual replica;visual stimuli;Legged locomotion;Navigation;Tracking;Trajectory;Virtual environments;Visualization;Locomotion;User behaviour;Virtual reality},
doi={10.1109/TVCG.2017.2657038},
ISSN={1077-2626},
month={April},}
```

CITATION

A. L. Simeone, I. Mavridou and W. Powell, "Altering User Movement Behaviour in Virtual Environments," in *IEEE Transactions on Visualization and Computer Graphics*, vol. 23, no. 4, pp. 1312-1321, April 2017.

URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=7835276&isnumber=7876887>

2. Warp sculpting**BibTeX**

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@ARTICLE{1388232,
author={J. Gain and P. Marais},
journal={IEEE Transactions on Visualization and Computer Graphics},
title={Warp sculpting},
year={2005},
volume={11},
number={2},
pages={217-227},
keywords={mesh generation;solid modelling;virtual reality;clay sculpting;computer-based free-form
shape design;interactive modeling;remeshing;rigid body transformation;self-intersection;spatial
deformation;warp sculpting;Computational efficiency;Computational modeling;Deformable
models;Fasteners;Finite element methods;Physics computing;Shape;Spatial resolution;Surface
reconstruction;Usability;Index Terms- Interactive modeling;remeshing.;self-intersection;spatial
deformation;Algorithms;Computer Graphics;Computer Simulation;Image Interpretation, Computer-
Assisted;Imaging, Three-Dimensional;Information Storage and Retrieval;Numerical Analysis,
Computer-Assisted;Pattern Recognition, Automated;Sculpture;User-Computer Interface},
doi={10.1109/TVCG.2005.36},
ISSN={1077-2626},
month={March},}
```

CITATION

J. Gain and P. Marais, "Warp sculpting," in *IEEE Transactions on Visualization and Computer Graphics*, vol. 11, no. 2, pp. 217-227, March-April 2005.

URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=1388232&isnumber=30207>

SOURCE: IEEE Computer Graphics and Applications (CG&A)***1. Layered Graph Drawing for Visualizing Evaluation Structures*****BibTeX**

```
@ARTICLE{7436633,
author={Y. Onoue and N. Kukimoto and N. Sakamoto and K. Misue and K. Koyamada},
journal={IEEE Computer Graphics and Applications},
title={Layered Graph Drawing for Visualizing Evaluation Structures},
year={2017},
```

volume={37},
 number={2},
 pages={20-30},
 keywords={cognition;data visualisation;graph theory;Sugiyama framework;evaluation grid
 method;evaluation structure visualization;human cognition extraction;layered graph
 drawing;Cognition;Data visualization;Human factors;Layout;Linear programming;Quadratic
 programming;Transforms;Kansei engineering;Sugiyama framework;computer graphics;evaluation grid
 method;layered graph drawing},
 doi={10.1109/MCG.2016.40},
 ISSN={0272-1716},
 month={Mar},}

CITATION

Y. Onoue, N. Kukimoto, N. Sakamoto, K. Misue and K. Koyamada, "Layered Graph Drawing for Visualizing Evaluation Structures," in *IEEE Computer Graphics and Applications*, vol. 37, no. 2, pp. 20-30, Mar.-Apr. 2017.

URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=7436633&isnumber=7879099>

2. IDGraphs: intrusion detection and analysis using stream compositing**BibTeX**

@ARTICLE{1607919,
 author={Pin Ren and Yan Gao and Zhichun Li and Yan Chen and B. Watson},
 journal={IEEE Computer Graphics and Applications},
 title={IDGraphs: intrusion detection and analysis using stream compositing},
 year={2006},
 volume={26},
 number={2},
 pages={28-39},
 keywords={data visualisation;interactive systems;security of data;IDGraphs;NetFlow network
 traffic;SYN-SYN/ACK;TCP SYN flooding;histographs;interactive visualization system;intrusion
 detection system;network traffic stream;Computer networks;Computer security;Computer
 worms;Electronics packaging;Information analysis;Information security;Intrusion
 detection;Monitoring;Telecommunication traffic;Visualization;Brushing and Linking;Correlation
 Matrix;Dynamic Query;Interactive System;Intrusion Detection;Security Visualization;Computer
 Communication Networks;Computer Graphics;Information Storage and Retrieval;Signal Processing,
 Computer-Assisted;Software;User-Computer Interface},
 doi={10.1109/MCG.2006.36},
 ISSN={0272-1716},
 month={March},}

CITATION

Pin Ren, Yan Gao, Zhichun Li, Yan Chen and B. Watson, "IDGraphs: intrusion detection and analysis using stream compositing," in *IEEE Computer Graphics and Applications*, vol. 26, no. 2, pp. 28-39, March-April 2006.

URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=1607919&isnumber=33767>

SOURCE: ACM SIGGRAPH *Computer Graphics* (conference proceedings only, published as an ACM TOG issue)

1. Constructing Intrinsic Delaunay Triangulations from the Dual of Geodesic Voronoi Diagrams

BibTeX

```
@article{Liu:2017:CID:3068851.2999532,
author = {Liu, Yong-Jin and Fan, Dian and Xu, Chun-Xu and He, Ying},
title = {Constructing Intrinsic Delaunay Triangulations from the Dual of Geodesic Voronoi Diagrams},
journal = {ACM Trans. Graph.},
issue_date = {April 2017},
volume = {36},
number = {2},
month = apr,
year = {2017},
issn = {0730-0301},
pages = {15:1--15:15},
articleno = {15},
numpages = {15},
url = {http://doi.acm.org.umasslowell.idm.oclc.org/10.1145/2999532},
doi = {10.1145/2999532},
acmid = {2999532},
publisher = {ACM},
address = {New York, NY, USA},
keywords = {Intrinsic Delaunay triangulation, duality, geodesic Voronoi diagram, the closed ball property},
}
```

ACM Ref

Yong-Jin Liu, Dian Fan, Chun-Xu Xu, and Ying He. 2017. Constructing Intrinsic Delaunay Triangulations from the Dual of Geodesic Voronoi Diagrams. *ACM Trans. Graph.* 36, 2, Article 15 (April 2017), 15 pages. DOI: <https://doi-org.umasslowell.idm.oclc.org/10.1145/2999532>

2. Using the visual differences predictor to improve performance of progressive global illumination computation

BibTeX

```
@article{Volevich:2000:UVD:343593.343611,
  author = {Volevich, Valdimir and Myszkowski, Karol and Khodulev, Andrei and Kopylov, Edward A.},
  title = {Using the Visual Differences Predictor to Improve Performance of Progressive Global Illumination Computation},
  journal = {ACM Trans. Graph.},
  issue_date = {April 2000},
  volume = {19},
  number = {2},
  month = apr,
  year = {2000},
  issn = {0730-0301},
  pages = {122--161},
  numpages = {40},
  url = {http://doi.acm.org.umasslowell.idm.oclc.org/10.1145/343593.343611},
  doi = {10.1145/343593.343611},
  acmid = {343611},
  publisher = {ACM},
  address = {New York, NY, USA},
  keywords = {Monte Carlo photon tracing, adaptive mesh subdivision, density estimation, human perception, progressive refinement, view-independent solutions},
}
```

ACM Ref

Valdimir Volevich, Karol Myszkowski, Andrei Khodulev, and Edward A. Kopylov. 2000. Using the visual differences predictor to improve performance of progressive global illumination computation. ACM Trans. Graph. 19, 2 (April 2000), 122-161.
DOI=<http://dx.doi.org.umasslowell.idm.oclc.org/10.1145/343593.343611>

SOURCE: Computers and Graphics(C&G)

1. Social media based 3D visual popularity

BibTeX

```
@article{BULBUL201728,
  title = "Social media based 3D visual popularity",
  journal = "Computers & Graphics",
  volume = "63",
  pages = "28 - 36",
  year = "2017",
}
```

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issn = "0097-8493",  
doi = "https://doi.org/10.1016/j.cag.2017.01.005",  
url = "http://www.sciencedirect.com/science/article/pii/S0097849317300146",  
author = "Abdullah Bulbul and Rozenn Dahyot",  
keywords = "Social media, Popularity, Visual attention, 3D cities"  
}
```

CITATION

Abdullah Bulbul, Rozenn Dahyot, Social media based 3D visual popularity, Computers & Graphics,
<https://doi.org/10.1016/j.cag.2017.01.005>.
(<http://www.sciencedirect.com/science/article/pii/S0097849317300146>)

2. VR simulated training for less invasive vascular intervention**BibTeX**

```
@article{CAI2003215,  
title = "VR simulated training for less invasive vascular intervention",  
journal = "Computers & Graphics",  
volume = "27",  
number = "2",  
pages = "215 - 221",  
year = "2003",  
issn = "0097-8493",  
doi = "https://doi.org/10.1016/S0097-8493(02)00278-9",  
url = "http://www.sciencedirect.com/science/article/pii/S0097849302002789",  
author = "Yiyu Cai and Cheekong Chui and Xiuzi Ye and Yaoping Wang and James H. Anderson",  
keywords = "Virtual reality, Simulation, Less invasive vascular intervention, Geometric modeling,  
Haptics"  
}
```

CITATION

Yiyu Cai, Cheekong Chui, Xiuzi Ye, Yaoping Wang, James H. Anderson, VR simulated training for less
invasive vascular intervention, Computers & Graphics,
[https://doi.org/10.1016/S0097-8493\(02\)00278-9](https://doi.org/10.1016/S0097-8493(02)00278-9).
(<http://www.sciencedirect.com/science/article/pii/S0097849302002789>)

SOURCE: Computers Graphics Forum(CGF)***1. Computational Light Painting Using a Virtual Exposure*****BibTeX**

```
@article{12318894020170501,
  Abstract = {Light painting is an artform where a light source is moved during a long-exposure shot,
    creating trails resembling a stroke on a canvas. It is very difficult to perform because the light source
    needs to be moved at the intended speed and along a precise trajectory. Additionally, images can be
    corrupted by the person moving the light. We propose computational light painting, which avoids such
    artifacts and is easy to use. Taking a video of the moving light as input, a virtual exposure allows us to
    draw the intended light positions in a post-process. We support animation, as well as 3D light sculpting,
    with high-quality results. [ABSTRACT FROM AUTHOR]},
  Author = {Salamon, Nestor Z. and Lancelle, Marcel and Eisemann, Elmar},
  ISSN = {01677055},
  Journal = {Computer Graphics Forum},
  Keywords = {LIGHT sources, ANIMATION (Cinematography), ARRAY processing, DIGITAL
    cameras, Categories and Subject Descriptors (according to ACM CCS), I.3.4 [Computer Graphics]:
    Graphics Utilities-Paint systems, MAN Ray, 1890-1976},
  Number = {2},
  Pages = {1 - 8},
  Title = {Computational Light Painting Using a Virtual Exposure.},
  Volume = {36},
  URL =
    {https://umasslowell.idm.oclc.org/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=aph
    &AN=123188940&site=ehost-live},
  Year = {2017},
}
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2. An Eye Gaze Model for Dyadic Interaction in an Immersive Virtual Environment: Practice and Experience**BibTeX**

```
@article{1275095420040301,
  Abstract = {This paper describes a behavioural model used to simulate realistic eye-gaze behaviour and
    body animations for avatars representing participants in a shared immersive virtual environment (IVE).
    The model was used in a study designed to explore the impact of avatar realism on the perceived quality
    of communication within a negotiation scenario. Our eye-gaze model was based on data and studies
    carried out on the behaviour of eye-gaze during face-to-face communication. The technical features of the
    model are reported here. Information about the motivation behind the study, experimental procedures and
    a full analysis of the results obtained are given in [ ]. [ABSTRACT FROM AUTHOR]},
  Author = {Vinayagamoorthy, V. and Garau, M. and Steed, A. and Slater, M.},
  ISSN = {01677055},
  Journal = {Computer Graphics Forum},
```


Keywords = {COMPUTER simulation, GAZE, COMPUTER-generated imagery, HUMAN-computer interaction, REAL-time computing, VIRTUAL reality, avatars, behaviour modelling, co-presence, DIVE, embodiment, eye-gaze, human-computer interaction, immersive virtual environments, non-verbal behaviour, real-time animation, virtual reality},
 Number = {1},
 Pages = {1 - 11},
 Title = {An Eye Gaze Model for Dyadic Interaction in an Immersive Virtual Environment: Practice and Experience.},
 Volume = {23},
 URL =
 {https://umasslowell.idm.oclc.org/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=aph
 &AN=12750954&site=ehost-live},
 Year = {2004},
 }

SOURCE: Visual Computer***1. Generating various composite human faces from real 3D facial images*****BibTeX**

```
@Article{Chalás2017,
author="Chalás, Igor
and Urbanov, Petra
and Juřík, Vojtěch
and Ferková, Zuzana
and Jandová, Marie
and Sochor, Jiří
and Kozlíková, Barbora",
title="Generating various composite human faces from real 3D facial images",
journal="The Visual Computer",
year="2017",
month="Apr",
day="01",
volume="33",
number="4",
pages="443--458",
abstract="Generating large human crowds of distinguishable individuals is one of the challenges in the gaming industry. When the scene contains many characters, it becomes impracticable to create all the individual characters manually. However, the requirement for the different appearances of individuals in a crowd, namely their faces, is now in greater demand. Therefore, this paper describes our solution to the automatic generation of human faces that are created as a composite of facial parts of 3D scans of real human faces. However, the user has the possibility to further adjust the composite by designing replacements, leading to a desired appearance. The final composite can be exported and attached to a given avatar. To evaluate the usability of our solution, we performed two case studies. The conducted perception study performed with 104 participants aimed to confirm the decreasing human ability to recognize
```

morphologically modified faces. The morphological study focused on the quantification of the extent of facial modifications. Both studies were performed by domain experts from psychology and anthropology.",
 issn="1432-2315",
 doi="10.1007/s00371-016-1277-1",
 url="https://doi.org/10.1007/s00371-016-1277-1"
 }

2. *A greedy Delaunay-based surface reconstruction algorithm*

BibTeX

```
@Article{Cohen-Steiner2004,
author="Cohen-Steiner, David
and Da, Frank",
title="A greedy Delaunay-based surface reconstruction algorithm",
journal="The Visual Computer",
year="2004",
month="Apr",
day="01",
volume="20",
number="1",
pages="4--16",
abstract="In this paper, we present a new greedy algorithm for surface reconstruction from unorganized point sets. Starting from a seed facet, a piecewise linear surface is grown by adding Delaunay triangles one by one. The most plausible triangles are added first and in such a way as to prevent the appearance of topological singularities. The output is thus guaranteed to be a piecewise linear orientable manifold, possibly with boundary. Experiments show that this method is very fast and achieves topologically correct reconstruction in most cases. Moreover, it can handle surfaces with complex topology, boundaries, and nonuniform sampling. ",
issn="1432-2315",
doi="10.1007/s00371-003-0217-z",
url="https://doi.org/10.1007/s00371-003-0217-z"
}
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