1. **ACM Transactions on Graphics (TOG)**
2. **Stabilizing Integrators for Real-Time Physics**

**Dinev, Dimitar and Liu, Tiantian and Kavan, Ladislav**

**BibTex**

@article{Dinev:2018:SIR:3151031.3153420,

author = {Dinev, Dimitar and Liu, Tiantian and Kavan, Ladislav},

title = {Stabilizing Integrators for Real-Time Physics},

journal = {ACM Trans. Graph.},

issue\_date = {January 2018},

volume = {37},

number = {1},

month = jan,

year = {2018},

issn = {0730-0301},

pages = {9:1--9:19},

articleno = {9},

numpages = {19},

url = {http://doi.acm.org/10.1145/3153420},

doi = {10.1145/3153420},

acmid = {3153420},

publisher = {ACM},

address = {New York, NY, USA},

keywords = {Real-time, energy conservation, physics-based animation, stability},

}

**ACM Ref**

Dimitar Dinev, Tiantian Liu, and Ladislav Kavan. 2018. Stabilizing Integrators for Real-Time Physics. ACM Trans. Graph. 37, 1, Article 9 (January 2018), 19 pages. DOI: https://doi.org/10.1145/3153420

1. **Position-based Tensegrity Design**

**Pietroni, Nico and Tarini, Marco and Vaxman, Amir and Panozzo, Daniele and Cignoni, Paolo**

**BibTex**

@article{Pietroni:2017:PTD:3130800.3130809,

author = {Pietroni, Nico and Tarini, Marco and Vaxman, Amir and Panozzo, Daniele and Cignoni, Paolo},

title = {Position-based Tensegrity Design},

journal = {ACM Trans. Graph.},

issue\_date = {November 2017},

volume = {36},

number = {6},

month = nov,

year = {2017},

issn = {0730-0301},

pages = {172:1--172:14},

articleno = {172},

numpages = {14},

url = {http://doi.acm.org/10.1145/3130800.3130809},

doi = {10.1145/3130800.3130809},

acmid = {3130809},

publisher = {ACM},

address = {New York, NY, USA},

keywords = {architectural geometry, tensegrity},

}

**ACM Ref**

Nico Pietroni, Marco Tarini, Amir Vaxman, Daniele Panozzo, and Paolo Cignoni. 2017. Position-based tensegrity design. ACM Trans. Graph. 36, 6, Article 172 (November 2017), 14 pages. DOI: <https://doi.org/10.1145/3130800.3130809>

**IEEE Transactions on Visualization and Computer Graphics (TVCG)**

# TopKube: A Rank-Aware Data Cube for Real-Time Exploration of Spatiotemporal Data

# F. Miranda and L. Lins and J. T. Klosowski and C. T. Silva

# BibTex

# @ARTICLE{7858782,  author={F. Miranda and L. Lins and J. T. Klosowski and C. T. Silva},  journal={IEEE Transactions on Visualization and Computer Graphics},  title={TopKube: A Rank-Aware Data Cube for Real-Time Exploration of Spatiotemporal Data},  year={2018},  volume={24},  number={3},  pages={1394-1407},  keywords={Benchmark testing;Data structures;Data visualization;Proposals;Real-time systems;Urban areas;Visualization;Interactive visualization;data cube;rank merging;top-K queries},  doi={10.1109/TVCG.2017.2671341},  ISSN={1077-2626},  month={March},}

# IEEE Ref

# F. Miranda, L. Lins, J. T. Klosowski and C. T. Silva, "TopKube: A Rank-Aware Data Cube for Real-Time Exploration of Spatiotemporal Data," in IEEE Transactions on Visualization and Computer Graphics, vol. 24, no. 3, pp. 1394-1407, March 1 2018. doi: 10.1109/TVCG.2017.2671341 keywords: {Benchmark testing;Data structures;Data visualization;Proposals;Real-time systems;Urban areas;Visualization;Interactive visualization;data cube;rank merging;top-K queries}, URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=7858782&isnumber=8272049>

# Creative Virtual Tree Modeling Through Hierarchical Topology-Preserving Blending

# Y. Wang and X. Xue and X. Jin and Z. Deng

# BibTex

# @ARTICLE{7775115,  author={Y. Wang and X. Xue and X. Jin and Z. Deng},  journal={IEEE Transactions on Visualization and Computer Graphics},  title={Creative Virtual Tree Modeling Through Hierarchical Topology-Preserving Blending},  year={2017},  volume={23},  number={12},  pages={2521-2534},  keywords={computer graphics;topology;trees (mathematics);blending procedure;blending scheduler;creative virtual tree;cross-species blending;hierarchical fuzzy correspondences;hierarchical topology-preserving blending;inspiring virtual trees;morphologically diverse trees;multiscale topology tree representations;topological consistency;topology-aware blending sequences;Animation;Computational modeling;Creativity;Geometry;Shape;Topology;Vegetation;Creative modeling;and shape blending;hierarchical topology preservation;tree modeling},  doi={10.1109/TVCG.2016.2636187},  ISSN={1077-2626},  month={Dec},}

# IEEE Ref

# Y. Wang, X. Xue, X. Jin and Z. Deng, "Creative Virtual Tree Modeling Through Hierarchical Topology-Preserving Blending," in IEEE Transactions on Visualization and Computer Graphics, vol. 23, no. 12, pp. 2521-2534, Dec. 1 2017. doi: 10.1109/TVCG.2016.2636187 keywords: {computer graphics;topology;trees (mathematics);blending procedure;blending scheduler;creative virtual tree;cross-species blending;hierarchical fuzzy correspondences;hierarchical topology-preserving blending;inspiring virtual trees;morphologically diverse trees;multiscale topology tree representations;topological consistency;topology-aware blending sequences;Animation;Computational modeling;Creativity;Geometry;Shape;Topology;Vegetation;Creative modeling;and shape blending;hierarchical topology preservation;tree modeling}, URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=7775115&isnumber=8089786>

**IEEE Computer Graphics and Applications (CG&A)**

# Blending Face Details: Synthesizing a Face Using Multiscale Face Models

# S. H. Yoon and J. Lewis and T. Rhee

# BibTex

# @ARTICLE{8103313,  author={S. H. Yoon and J. Lewis and T. Rhee},  journal={IEEE Computer Graphics and Applications},  title={Blending Face Details: Synthesizing a Face Using Multiscale Face Models},  year={2017},  volume={37},  number={6},  pages={65-75},  keywords={computer graphics;2D parameter space;3D face mesh;CDMs;MFM;computer graphics;face details;multiscale continuous displacement maps;multiscale face models;nonhuman characters;salient facial features;weighted multiscale detail blending;Computational modeling;Face recognition;Semantics;Shape analysis;Solid modeling;Splines (mathematics);Three-dimensional displays;blendshapes;computer graphics;continuous displacement maps;face modeling;multilevel b-spline;multiscale face model;parameterization},  doi={10.1109/MCG.2017.4031069},  ISSN={0272-1716},  month={November},}

# IEEE Ref:

# S. H. Yoon, J. Lewis and T. Rhee, "Blending Face Details: Synthesizing a Face Using Multiscale Face Models," in IEEE Computer Graphics and Applications, vol. 37, no. 6, pp. 65-75, November/December 2017. doi: 10.1109/MCG.2017.4031069 keywords: {computer graphics;2D parameter space;3D face mesh;CDMs;MFM;computer graphics;face details;multiscale continuous displacement maps;multiscale face models;nonhuman characters;salient facial features;weighted multiscale detail blending;Computational modeling;Face recognition;Semantics;Shape analysis;Solid modeling;Splines (mathematics);Three-dimensional displays;blendshapes;computer graphics;continuous displacement maps;face modeling;multilevel b-spline;multiscale face model;parameterization}, URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8103313&isnumber=8103309>

# Typology of Uncertainty in Static Geolocated Graphs for Visualization

# T. von Landesberger and S. Bremm and M. Wunderlich

# BibTex

# @ARTICLE{8047424,  author={T. von Landesberger and S. Bremm and M. Wunderlich},  journal={IEEE Computer Graphics and Applications},  title={Typology of Uncertainty in Static Geolocated Graphs for Visualization},  year={2017},  volume={37},  number={5},  pages={18-27},  keywords={data visualisation;decision making;graph theory;decision making;geographic location;source data;static geolocated graphs;uncertainty typology;visualization;Data science;Edge detection;Geographic information systems;Topology;Visualization;GIS;computer graphics;edge uncertainty;geographic data science;networks;node uncertainty;spatial databases;visualization},  doi={10.1109/MCG.2017.3621220},  ISSN={0272-1716},  month={},}

# IEEE Ref

# T. von Landesberger, S. Bremm and M. Wunderlich, "Typology of Uncertainty in Static Geolocated Graphs for Visualization," in IEEE Computer Graphics and Applications, vol. 37, no. 5, pp. 18-27, 2017. doi: 10.1109/MCG.2017.3621220 keywords: {data visualisation;decision making;graph theory;decision making;geographic location;source data;static geolocated graphs;uncertainty typology;visualization;Data science;Edge detection;Geographic information systems;Topology;Visualization;GIS;computer graphics;edge uncertainty;geographic data science;networks;node uncertainty;spatial databases;visualization}, URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8047424&isnumber=8047422>

# Computers and Graphics (C&G)

# Parametric modeling of 3D human body shape—A survey

# Zhi-Quan Cheng and Yin Chen and Ralph R. Martin and Tong Wu and Zhan Song

# BibTex

@article{CHENG201888,

title = "Parametric modeling of 3D human body shape—A survey",

journal = "Computers & Graphics",

volume = "71",

pages = "88 - 100",

year = "2018",

issn = "0097-8493",

doi = "https://doi.org/10.1016/j.cag.2017.11.008",

url = "http://www.sciencedirect.com/science/article/pii/S0097849317301929",

author = "Zhi-Quan Cheng and Yin Chen and Ralph R. Martin and Tong Wu and Zhan Song",

keywords = "3D human body, Survey, Parametric human shape model, Avatar capture, Applications of human shape models"

}

**Ref**

Zhi-Quan Cheng, Yin Chen, Ralph R. Martin, Tong Wu, Zhan Song,Parametric modeling of 3D human body shape—A survey,Computers & Graphics,Volume 71,2018,Pages 88-100,ISSN 0097-8493,https://doi.org/10.1016/j.cag.2017.11.008.(http://www.sciencedirect.com/science/article/pii/S0097849317301929)Keywords: 3D human body; Survey; Parametric human shape model; Avatar capture; Applications of human shape models

# Physics-based deformation of subdivision surfaces for shared virtual worlds

**Andreas Riffnaller-Schiefer and Ursula H. Augsdörfer and Dieter W. Fellner**

**BibTex**

@article{RIFFNALLERSCHIEFER201866,

title = "Physics-based deformation of subdivision surfaces for shared virtual worlds",

journal = "Computers & Graphics",

volume = "71",

pages = "66 - 76",

year = "2018",

issn = "0097-8493",

doi = "https://doi.org/10.1016/j.cag.2017.12.005",

url = "http://www.sciencedirect.com/science/article/pii/S0097849317302182",

author = "Andreas Riffnaller-Schiefer and Ursula H. Augsdörfer and Dieter W. Fellner",

keywords = "Subdivision surfaces, Isogeometric analysis, Interactive, Soft-body, Web service"

}

**Ref**

Andreas Riffnaller-Schiefer, Ursula H. Augsdörfer, Dieter W. Fellner,

Physics-based deformation of subdivision surfaces for shared virtual worlds,

Computers & Graphics,

Volume 71,

2018,

Pages 66-76,

ISSN 0097-8493,

https://doi.org/10.1016/j.cag.2017.12.005.

(http://www.sciencedirect.com/science/article/pii/S0097849317302182)

Keywords: Subdivision surfaces; Isogeometric analysis; Interactive; Soft-body; Web service

**Computer Graphics Forum**

# Stream Line–Based Pattern Search in Flows

# Wang, Z. and Esturo, J. Martinez and Seidel, H.-P. and Weinkauf, T.

# BibTex

@article {CGF:CGF12990,

author = {Wang, Z. and Esturo, J. Martinez and Seidel, H.-P. and Weinkauf, T.},

title = {Stream Line–Based Pattern Search in Flows},

journal = {Computer Graphics Forum},

volume = {36},

number = {8},

issn = {1467-8659},

url = {http://dx.doi.org/10.1111/cgf.12990},

doi = {10.1111/cgf.12990},

pages = {7--18},

keywords = {visualization, pattern search, stream lines, Categories and Subject Descriptors (according to ACM CCS): I.3.3 [Computer Graphics]: Picture/Image Generation–Line and curve generation},

year = {2017},

}

# Rib-reinforced Shell Structure

# Li, Wei and Zheng, Anzong and You, Lihua and Yang, Xiaosong and Zhang, Jianjun and Liu, Ligang

@article {CGF:CGF13268,

author = {Li, Wei and Zheng, Anzong and You, Lihua and Yang, Xiaosong and Zhang, Jianjun and Liu, Ligang},

title = {Rib-reinforced Shell Structure},

journal = {Computer Graphics Forum},

volume = {36},

number = {7},

issn = {1467-8659},

url = {http://dx.doi.org/10.1111/cgf.13268},

doi = {10.1111/cgf.13268},

pages = {15--27},

keywords = {Categories and Subject Descriptors (according to ACM CCS), I.3.5 [Computer Graphics]: Computational Geometry and Object Modeling—Curve, surface, solid and object representations, Architectural geometry, Rib-shell structure, Principal stress},

year = {2017},

}

**Visual Computer**

1. **Biologically inspired simulation of livor mortis**

**Frerichs, Dhana and Vidler, Andrew and Gatzidis, christos**

**BibTex**

@Article{Frerichs2016,

author="Frerichs, Dhana and Vidler, Andrew and Gatzidis, christos",

title="Biologically inspired simulation of livor mortis",

journal="The Visual Computer",

year="2016",

pages="1--14",

issn="1432-2315",

doi="10.1007/s00371-016-1291-3",

url="http://dx.doi.org/10.1007/s00371-016-1291-3"

}

1. **Bombs, fish, and coral reefs**

**Bergervoet, E. J. and van der Sluis, F. and van Dijk, E. M. A. G. and Nijholt, A.**

***BibTex***

@Article{Bergervoet2013,

author="Bergervoet, E. J. and van der Sluis, F. and van Dijk, E. M. A. G. and Nijholt, A.",

title="Bombs, fish, and coral reefs",

journal="The Visual Computer",

year="2013",

volume="29",

number="2",

pages="99--110",

issn="1432-2315",

doi="10.1007/s00371-012-0720-1",

url="http://dx.doi.org/10.1007/s00371-012-0720-1"

}

**ACM SIGGRAPH Computer Graphics**

# Art + technology: the new frontier of creativity and innovation

# Chestney-Harvey, Kim

# BibTex

@article{Chestney-Harvey:2011:ATN:1982562.1982566,

author = {Chestney-Harvey, Kim},

title = {Art + Technology: The New Frontier of Creativity and Innovation},

journal = {SIGGRAPH Comput. Graph.},

issue\_date = {February 2011},

volume = {45},

number = {1},

month = feb,

year = {2011},

issn = {0097-8930},

pages = {2:1--2:6},

articleno = {2},

numpages = {6},

url = {http://doi.acm.org/10.1145/1982562.1982566},

doi = {10.1145/1982562.1982566},

acmid = {1982566},

publisher = {ACM},

address = {New York, NY, USA},

}

**Ref**

Kim Chestney-Harvey. 2011. Art + technology: the new frontier of creativity and innovation. SIGGRAPH Comput. Graph. 45, 1, Article 2 (February 2011), 6 pages. DOI=http://dx.doi.org/10.1145/1982562.1982566

# Coordination, collaboration and the impact of computer graphics

**Westman, Hans**

@article{Westman:2011:CCI:1982562.1982564,

author = {Westman, Hans},

title = {Coordination, Collaboration and the Impact of Computer Graphics},

journal = {SIGGRAPH Comput. Graph.},

issue\_date = {February 2011},

volume = {45},

number = {1},

month = feb,

year = {2011},

issn = {0097-8930},

pages = {1:1--1:2},

articleno = {1},

numpages = {2},

url = {http://doi.acm.org/10.1145/1982562.1982564},

doi = {10.1145/1982562.1982564},

acmid = {1982564},

publisher = {ACM},

address = {New York, NY, USA},

}

**Ref**

Hans Westman. 2011. Coordination, collaboration and the impact of computer graphics. SIGGRAPH Comput. Graph. 45, 1, Article 1 (February 2011), 2 pages. DOI=http://dx.doi.org/10.1145/1982562.1982564