Enrico Puppo

List of Publications by Year in descending order

82 papers	2,172 citations	257450 24 h-index	276875 41 g-index
85 all docs	85 docs citations	85 times ranked	922 citing authors

#	Article	IF	Citations
1	Quadâ€Mesh Generation and Processing: A Survey. Computer Graphics Forum, 2013, 32, 51-76.	3.0	229
2	Hierarchical triangulation for multiresolution surface description. ACM Transactions on Graphics, 1995, 14, 363-411.	7.2	123
3	Speeding up isosurface extraction using interval trees. IEEE Transactions on Visualization and Computer Graphics, 1997, 3, 158-170.	4.4	117
4	Line-of-sight communication on terrain models. International Journal of Geographical Information Science, 1994, 8, 329-342.	4.8	96
5	Practical quad mesh simplification. Computer Graphics Forum, 2010, 29, 407-418.	3.0	87
6	Representation and visualization of terrain surfaces at variable resolution. Visual Computer, 1997, 13, 199-217.	3.5	85
7	Multiresolution models for topographic surface description. Visual Computer, 1996, 12, 317-345.	3.5	76
8	Frame fields. ACM Transactions on Graphics, 2014, 33, 1-11.	7.2	74
9	Simple quad domains for field aligned mesh parametrization. ACM Transactions on Graphics, 2011, 30, 1-12.	7.2	68
10	An on-line algorithm for constrained Delaunay triangulation. Graphical Models, 1992, 54, 290-300.	0.6	67
11	Multiresolution representation and visualization of volume data. IEEE Transactions on Visualization and Computer Graphics, 1997, 3, 352-369.	4.4	67
12	Multiresolution modeling and visualization of volume data based on simplicial complexes. , 1994, , .		66
13	Variable resolution triangulations. Computational Geometry: Theory and Applications, 1998, 11, 219-238.	0.5	49
14	Extraction of the Quad Layout of a Triangle Mesh Guided by Its Curve Skeleton. ACM Transactions on Graphics, 2015, 35, 1-13.	7.2	44
15	VARIANT: A System for Terrain Modeling at Variable Resolution. GeoInformatica, 2000, 4, 287-315.	2.7	43
16	Skeletonâ€driven Adaptive Hexahedral Meshing of Tubular Shapes. Computer Graphics Forum, 2016, 35, 237-246.	3.0	39
17	Fields on symmetric surfaces. ACM Transactions on Graphics, 2012, 31, 1-12.	7.2	38
18	Efficient implementation of multi-triangulations. , 0, , .		36

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19	Selective refinement queries for volume visualization of unstructured tetrahedral meshes. IEEE Transactions on Visualization and Computer Graphics, 2004, 10, 29-45.	4.4	35
20	Statics Aware Grid Shells. Computer Graphics Forum, 2015, 34, 627-641.	3.0	33
21	A hierarchical triangle-based model for terrain description. Lecture Notes in Computer Science, 1992, , 236-251.	1.3	31
22	A Formal Approach to Multiresolution Hypersurface Modeling. , 1997, , 302-323.		30
23	Applications of Computational Geometry to Geographic Information Systems. , 2000, , 333-388.		29
24	A multi-resolution topological representation for non-manifold meshes. CAD Computer Aided Design, 2004, 36, 141-159.	2.7	29
25	Morphology-driven simplification and multiresolution modeling of terrains. , 2003, , .		28
26	Building and traversing a surface at variable resolution. , 0, , .		27
27	A Survey on Data Structures for Level-of-Detail Models. Mathematics and Visualization, 2005, , 49-74.	0.6	27
28	Tracing Fieldâ€Coherent Quad Layouts. Computer Graphics Forum, 2016, 35, 485-496.	3.0	27
29	A complete system for on-line 3D modelling from acoustic images. Signal Processing: Image Communication, 2005, 20, 832-852.	3.2	26
30	Dynamic view-dependent multiresolution on a clientâ€“server architecture. CAD Computer Aided Design, 2000, 32, 805-823.	2.7	23
31	Parallel terrain triangulation. International Journal of Geographical Information Science, 1994, 8, 105-128.	4.8	22
32	Automatic Construction of Quad-Based Subdivision Surfaces Using Fitmaps. IEEE Transactions on Visualization and Computer Graphics, 2011, 17, 1510-1520.	4.4	22
33	Level-of-detail for data analysis and exploration: A historical overview and some new perspectives. Computers and Graphics, 2006, 30, 334-344.	2.5	21
34	Data-driven interactive quadrangulation. ACM Transactions on Graphics, 2015, 34, 1-10.	7.2	21
35	Spatial queries and data models. Lecture Notes in Computer Science, 1993, , 113-138.	1.3	19
36	Compressing Triangulated Irregular Networks. GeoInformatica, 2000, 4, 67-88.	2.7	15

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37	Decomposing non-manifold objects in arbitrary dimensions. Graphical Models, 2003, 65, 2-22.	2.4	15
38	Animationâ€Aware Quadrangulation. Computer Graphics Forum, 2013, 32, 167-175.	3.0	15
39	Simple quad domains for field aligned mesh parametrization. , 2011, , .		14
40	Stability of Statics Aware Voronoi Grid-Shells. Engineering Structures, 2016, 116, 70-82.	5.3	14
41	Mosaicing of 3D Sonar Data Sets - Techniques and Applications. , 0, , .		13
42	Multi-VMap: A Multi-Scale Model for Vector Maps. GeoInformatica, 2006, 10, 359-394.	2.7	13
43	Extracting contour lines from a hierarchical surface model. Computer Graphics Forum, 1993, 12, 249-260.	3.0	12
44	Evaluating Movement Quality Through Intrapersonal Synchronization. IEEE Transactions on Human-Machine Systems, 2019, 49, 304-313.	3.5	12
45	A comparison of methods for gradient field estimation on simplicial meshes. Computers and Graphics, 2019, 80, 37-50.	2.5	12
46	Discrete visibility problems and graph algorithms. International Journal of Geographical Information Science, 1997, 11, 139-161.	4.8	11
47	Data Structures for Simplicial Multi-complexes. Lecture Notes in Computer Science, 1999, , 33-51.	1.3	11
48	Efficient on-line mosalcing from 3d acoustical images. , 0, , .		9
49	A multi-resolution topological representation for non-manifold meshes. , 2002, , .		8
50	A continuous scale-space method for the automated placement of spot heights on maps. Computers and Geosciences, 2017, 109, 216-227.	4.2	8
51	A Multimodal Dataset for the Analysis of Movement Qualities in Karate Martial Art. , 2015, , .		8
52	RGB Subdivision. IEEE Transactions on Visualization and Computer Graphics, 2009, 15, 295-310.	4.4	7
53	Multi-resolution out-of-core modeling of terrain and teological data. , 2005, , .		7
54	Compressing TINs. , 1998, , .		6

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55	Limbs synchronisation as a measure of movement quality in karate. , 2017, , .		6
56	VARIANT---processing and visualizing terrains at variable resolution. , 1997, , .		5
57	The half-edge tree: a compact data structure for level-of-detail tetrahedral meshes. , 0, , .		5
58	Skeleton based cage generation guided by harmonic fields. Computers and Graphics, 2019, 81, 140-151.	2.5	5
59	Compressing Multiresolution Triangle Meshes. Lecture Notes in Computer Science, 2001, , 345-364.	1.3	5
60	Data Structures for 3D Multi-Tessellations: An Overview. , 2003, , 239-255.		5
61	Implicit Hierarchical Quadâ€Dominant Meshes. Computer Graphics Forum, 2011, 30, 1617-1629.	3.0	4
62	Practical Computation of the Cut Locus on Discrete Surfaces. Computer Graphics Forum, 2021, 40, 261-273.	3.0	3
63	Manipulating three-dimensional triangulations. Lecture Notes in Computer Science, 1989, , 339-353.	1.3	3
64	Hierarchical hypersurface modeling. Lecture Notes in Computer Science, 1994, , 88-97.	1.3	3
65	Overview+Detail Visual Comparison of Karate Motion Captures. Communications in Computer and Information Science, 2020, , 139-154.	0.5	3
66	Out-of-core Multiresolution Terrain Modeling. , 2007, , 43-63.		3
67	Vector graphics on surfaces using straightedge and compass constructions. Computers and Graphics, 2022, 105, 46-56.	2.5	3
68	HIDEL: A Language for Hierarchical VLSI Design. Computer Journal, 1991, 34, 195-206.	2.4	2
69	Scale-Space Techniques for Fiducial Points Extraction from 3D Faces. Lecture Notes in Computer Science, 2015, , 421-431.	1.3	2
70	A hardware description language based on a hierarchical graph model. Microprocessing and Microprogramming, 1987, 20, 183-188.	0.2	1
71	Multi-Scale Geographic Maps. , 2005, , 101-115.		1
72	Realâ€Time Deformation with Coupled Cages and Skeletons. Computer Graphics Forum, 2020, 39, 19-32.	3.0	1

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73	Adaptive LOD editing of quad meshes. , 2010, , .		1
74	Visualizing parametric surfaces at variable resolution. Lecture Notes in Computer Science, 1997, , 308-315.	1.3	1
75	On the topological representation of line drawings. Pattern Recognition Letters, 1997, 18, 575-582.	4.2	0
76	Designing a library to support model-oriented generalization. , 1998, , .		0
77	An Algorithm for Decomposing Multi-dimensional Non-manifold Objects into Nearly Manifold Components. Mathematics and Visualization, 2005, , 75-87.	0.6	0
78	Representing Vertex-Based Simplicial Multi-complexes. Lecture Notes in Computer Science, 2001, , 129-149.	1.3	0
79	Optimal Isosurface Extraction. , 2005, , 69-82.		0
80	Multi-Resolution Terrain Modeling. , 2009, , 1853-1857.		0
81	Patchwork Terrains: Multi-resolution Representation from Arbitrary Overlapping Grids with Dynamic Update. Communications in Computer and Information Science, 2013, , 48-66.	0.5	0
82	Clustering Techniques for Out-of-Core Multi-resolution Modeling. , 0, , .		0