Ugur Gudukbay

List of Publications by Year
in descending order

109 papers	2,144 citations	361045 20 h-index	264894 42 g-index
111 all docs	111 docs citations	111 times ranked	1622 citing authors

#	Article	IF	Citations
1	Computer vision based method for real-time fire and flame detection. Pattern Recognition Letters, 2006, 27, 49-58.	2.6	489
2	Adaptive grids: an image-based approach to generate navigation meshes. Optical Engineering, 2013, 52, 1.	0.5	124
3	How the Ocean Personality Model Affects the Perception of Crowds. IEEE Computer Graphics and Applications, 2011, 31, 22-31.	1.0	120
4	Psychological Parameters for Crowd Simulation: From Audiences to Mobs. IEEE Transactions on Visualization and Computer Graphics, 2016, 22, 2145-2159.	2.9	92
5	Fuzzy color histogram-based video segmentation. Computer Vision and Image Understanding, 2010, 114, 125-134.	3.0	81
6	Scene Representation Technologies for 3DTVâ€"A Survey. IEEE Transactions on Circuits and Systems for Video Technology, 2007, 17, 1587-1605.	5.6	80
7	A hand gesture recognition technique for humanâ€"computer interaction. Journal of Visual Communication and Image Representation, 2015, 28, 97-104.	1.7	73
8	A histogram-based approach for object-based query-by-shape-and-color in image and video databases. Image and Vision Computing, 2005, 23, 1170-1180.	2.7	64
9	Bilvideo-7: an MPEG-7- compatible video indexing and retrieval system. IEEE MultiMedia, 2010, 17, 62-73.	1.5	56
10	Silhouette-Based Method for Object Classification and Human Action Recognition in Video. Lecture Notes in Computer Science, 2006, , 64-77.	1.0	55
11	Content-Based Retrieval of Historical Ottoman Documents Stored as Textual Images. IEEE Transactions on Image Processing, 2004, 13, 314-325.	6.0	54
12	BilVideo: Design and Implementation of a Video Database Management System. Multimedia Tools and Applications, 2005, 27, 79-104.	2.6	44
13	Real-Time Fire and Flame Detection in Video. , 0, , .		38
14	Emergency crowd simulation for outdoor environments. Computers and Graphics, 2010, 34, 136-144.	1.4	37
15	Automatic detection of salient objects and spatial relations in videos for a video database system. Image and Vision Computing, 2008, 26, 1384-1396.	2.7	28
16	Using real life incidents for creating realistic virtual crowds with data-driven emotion contagion. Computers and Graphics, 2018, 72, 70-81.	1.4	26
17	A Conversational Agent Framework with Multi-modal Personality Expression. ACM Transactions on Graphics, 2021, 40, 1-16.	4.9	26
18	A rule-based video database system architecture. Information Sciences, 2002, 143, 13-45.	4.0	24

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19	Early Wildfire Smoke Detection Based on Motion-based Geometric Image Transformation and Deep Convolutional Generative Adversarial Networks. , 2019, , .		24
20	A spring force formulation for elastically deformable models. Computers and Graphics, 1997, 21, 335-346.	1.4	23
21	Rule-based spatiotemporal query processing for video databases. VLDB Journal, 2004, 13, 86-103.	2.7	23
22	Real-time virtual fitting with body measurement and motion smoothing. Computers and Graphics, 2014, 43, 31-43.	1.4	23
23	Stereoscopic view-dependent visualization of terrain height fields. IEEE Transactions on Visualization and Computer Graphics, 2002, 8, 330-345.	2.9	20
24	Video copy detection using multiple visual cues and MPEG-7 descriptors. Journal of Visual Communication and Image Representation, 2010, 21, 838-849.	1.7	20
25	Scenario-based query processing for video-surveillance archives. Engineering Applications of Artificial Intelligence, 2010, 23, 331-345.	4.3	20
26	BilVideo: a video database management system. IEEE MultiMedia, 2003, 10, 66-70.	1.5	19
27	Ottoman archives explorer. Journal on Computing and Cultural Heritage, 2009, 2, 1-20.	1.2	16
28	Keyframe labeling technique for surveillance event classification. Optical Engineering, 2010, 49, 117203.	0.5	16
29	A Natural Language-Based Interface for Querying a Video Database. IEEE MultiMedia, 2007, 14, 83-89.	1.5	15
30	GPU-Based Neighbor-Search Algorithm for Particle Simulations. Journal of Graphics Tools, 2009, 14, 31-42.	0.3	15
31	Nearest-Neighbor based Metric Functions for indoor scene recognition. Computer Vision and Image Understanding, 2011, 115, 1483-1492.	3.0	15
32	ACMICS: an agent communication model for interacting crowd simulation. Autonomous Agents and Multi-Agent Systems, 2017, 31, 1403-1423.	1.3	15
33	Direct volume rendering of unstructured tetrahedral meshes using CUDA and OpenMP. Journal of Supercomputing, 2014, 67, 324-344.	2.4	13
34	Free-form solid modeling using deformations. Computers and Graphics, 1990, 14, 491-500.	1.4	12
35	An MPEG-7 Compatible Video Retrieval System with Integrated Support for Complex Multimodal Queries. IEEE MultiMedia, 2019, , 1-1.	1.5	12
36	Deep Convolutional Generative Adversarial Networks for Flame Detection in Video. Lecture Notes in Computer Science, 2020, , 807-815.	1.0	12

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37	Flexible test-bed for unusual behavior detection. , 2007, , .		11
38	A Virtual Garment Design and Simulation System. , 2007, , .		11
39	Integrated segmentation and recognition of connected Ottoman script. Optical Engineering, 2009, 48, 117205.	0.5	11
40	Saliency for animated meshes with material properties. , 2010, , .		11
41	Motion capture and human pose reconstruction from a single-view video sequence. , 2013, 23, 1441-1450.		11
42	Multimodal assessment of apparent personality using feature attention and error consistency constraint. Image and Vision Computing, 2021, 110, 104163.	2.7	11
43	Procedural visualization of knitwear and woven cloth. Computers and Graphics, 2007, 31, 778-783.	1.4	10
44	Animation of deformable models. CAD Computer Aided Design, 1994, 26, 868-875.	1.4	8
45	Direct volume rendering of unstructured grids. Computers and Graphics, 2003, 27, 387-406.	1.4	8
46	Conservative occlusion culling for urban visualization using a slice-wise data structure. Graphical Models, 2007, 69, 191-210.	1.1	8
47	Particle-based simulation of the interaction between fluid and knitwear. Signal, Image and Video Processing, 2014, 8, 415-422.	1.7	8
48	Sun position estimation and tracking for virtual object placement in time-lapse videos. Signal, Image and Video Processing, 2017, 11, 817-824.	1.7	8
49	A Database Model for Querying Visual Surveillance Videos by Integrating Semantic and Low-Level Features. Lecture Notes in Computer Science, 2005, , 163-176.	1.0	8
50	Rate-Distortion Efficient Piecewise Planar 3-D Scene Representation From 2-D Images. IEEE Transactions on Image Processing, 2009, 18, 483-494.	6.0	7
51	Increasing the Sense of Presence in a Simulation Environment Using Image Generators Based on Visual Attention. Presence: Teleoperators and Virtual Environments, 2010, 19, 557-568.	0.3	7
52	Dynamic view-dependent visualization of unstructured tetrahedral volumetric meshes. Journal of Visualization, 2012, 15, 167-178.	1.1	7
53	A hybrid representation for modeling, interactive editing, and real-time visualization of terrains with volumetric features. International Journal of Geographical Information Science, 2014, 28, 1821-1847.	2.2	7
54	A group€based approach for gaze behavior of virtual crowds incorporating personalities. Computer Animation and Virtual Worlds, 2018, 29, e1806.	0.7	7

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55	BilVideo Video Database Management System. , 2004, , 1373-1376.		7
56	Ray-traced Shell Traversal of Tetrahedral Meshes for Direct Volume Visualization. , 2021, , .		7
57	A video-based text and equation editor for LaTeX. Engineering Applications of Artificial Intelligence, 2008, 21, 952-960.	4.3	6
58	Keyframe Reduction Techniques for Motion Capture Data. , 2008, , .		6
59	KiMPA: A Kinematics-Based Method for Polygon Approximation. Lecture Notes in Computer Science, 2002, , 186-194.	1.0	6
60	Integrated Querying of Images by Color, Shape, and Texture Content of Salient Objects. Lecture Notes in Computer Science, 2004, , 363-371.	1.0	6
61	Beyond Tradition and Modernity: Digital Shadow Theater. Leonardo, 2000, 33, 264-265.	0.2	5
62	Particle-based simulation and visualization of fluid flows through porous media. Journal of Visualization, 2010, 13, 327-336.	1.1	5
63	HandVR: a hand-gesture-based interface to a video retrieval system. Signal, Image and Video Processing, 2015, 9, 1717-1726.	1.7	5
64	PETAL: A fully distributed location service for wireless ad hoc networks. Journal of Network and Computer Applications, 2017, 83, 1-11.	5.8	5
65	An animation system for rigid and deformable models. Computers and Graphics, 1993, 17, 71-77.	1.4	4
66	Realistic speech animation of synthetic faces. , 0, , .		4
67	Connectivity-Guided Adaptive Lifting Transform for Image Like Compression of Meshes. , 2007, , .		4
68	Segmentation-based extraction of important objects from video for object-based indexing. , 2008, , .		4
69	Visualization of crowd synchronization on footbridges. Journal of Visualization, 2010, 13, 69-77.	1.1	4
70	Application-Specific Heterogeneous Network-on-Chip Design. Computer Journal, 2014, 57, 1117-1131.	1.5	4
71	MaterialVis: Material visualization tool using direct volume and surface rendering techniques. Journal of Molecular Graphics and Modelling, 2014, 50, 50-60.	1.3	4
72	An augmented crowd simulation system using automatic determination of navigable areas. Computers and Graphics, 2021, 95, 141-155.	1.4	4

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73	A Rule-Based Approach to Represent Spatio-Temporal Relations in Video Data. Lecture Notes in Computer Science, 2000, , 409-418.	1.0	4
74	Modeling and Visualization of Complex Geometric Environments. , 2004, , 3-30.		4
75	A movable jaw model for the human face. Computers and Graphics, 1997, 21, 549-554.	1.4	3
76	An efficient query optimization strategy for spatio-temporal queries in video databases. Journal of Systems and Software, 2004, 73, 113-131.	3.3	3
77	Nonrectangular wavelets for multiresolution mesh analysis and compression. , 2006, 6247, 19.		3
78	Mobile multi-view object image search. Multimedia Tools and Applications, 2017, 76, 12433-12456.	2.6	3
79	Approximation algorithms for visibility computation and testing over a terrain. Applied Geomatics, 2017, 9, 53-59.	1.2	3
80	Recognition of occupational therapy exercises and detection of compensation mistakes for Cerebral Palsy. Journal of Visual Communication and Image Representation, 2020, 73, 102970.	1.7	3
81	Practical and Realistic Animation of Cloth. , 2007, , .		2
82	Motion Control for Realistic Walking Behavior using Inverse Kinematics. , 2007, , .		2
83	3D Model Compression using Connectivity-guided Adaptive Lifting Transform. , 2007, , .		2
84	Stereoscopic urban visualization based on graphics processor unit. Optical Engineering, 2008, 47, 097005.	0.5	2
85	Special issue on advances in three-dimensional television and video: Guest editorial. Signal Processing: Image Communication, 2009, 24, 1-2.	1.8	2
86	Dynamic point-region quadtrees for particle simulations. Information Sciences, 2013, 218, 133-145.	4.0	2
87	Augmentation of virtual agents in real crowd videos. Signal, Image and Video Processing, 2019, 13, 643-650.	1.7	2
88	Multiâ€level tetrahedralizationâ€based accelerator for rayâ€tracing animated scenes. Computer Animation and Virtual Worlds, 2021, 32, e2024.	0.7	2
89	An Algorithm for Progressive Raytracing. Lecture Notes in Computer Science, 2000, , 248-256.	1.0	2
90	Right-triangular subdivision for texture mapping ray-traced objects. Visual Computer, 1998, 14, 445-454.	2.5	1

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91	PHR: A Parallel Hierarchical Radiosity System with Dynamic Load Balancing. Journal of Supercomputing, 2005, 31, 249-263.	2.4	1
92	Realistic Rendering and Animation of a Multi-Layered Human Body Model. , 0, , .		1
93	Pattern information extraction from crystal structures. Computer Physics Communications, 2007, 176, 486-506.	3.0	1
94	Three-dimensional Scene Representations: Modeling, Animation, and Rendering Techniques. , 2008, , 165-200.		1
95	3D Model compression using Connectivity-Guided Adaptive Wavelet Transform built into 2D SPIHT. Journal of Visual Communication and Image Representation, 2010, 21, 17-28.	1.7	1
96	Fast Stiffness Matrix Calculation for Nonlinear Finite Element Method. Journal of Applied Mathematics, 2014, 2014, 1-12.	0.4	1
97	BilKristal 2.0: A tool for pattern information extraction from crystal structures. Computer Physics Communications, 2014, 185, 442-443.	3.0	1
98	Privacy-preserving and robust watermarking on sequential genome data using belief propagation and local differential privacy. Bioinformatics, 2021, 37, 2668-2674.	1.8	1
99	Modeling, Animation, and Rendering of Human Figures. , 2008, , 201-238.		1
100	Compact tetrahedralization-based acceleration structures for ray tracing. Journal of Visualization, 0, , 1.	1.1	1
101	Visualizer: a mesh visualization system using view-dependent refinement. Computers and Graphics, 2002, 26, 491-503.	1.4	0
102	Computer vision based text and equation editor for LATEX. , 0, , .		0
103	Piecewise-Planar 3D Reconstruction in Rate-Distortion Sense. , 2007, , .		0
104	Rate-Distortion Based Piecewise Planar 3D Scene Geometry Representation. , 2007, , .		0
105	Rate-Distortion Guided Piecewise Planar 3D Scene Representation. , 2007, , .		0
106	Integration of Structural and Semantic Models for Multimedia Metadata Management. , 2007, , .		0
107	Automatic extraction of important objects for an MPEG-7 compliant video database system. , 2008, , .		0
108	Mobile image search using multi-query images. , 2015, , .		0

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109	Augmentation of Virtual Agents in Real Crowd Videos. , 2019, , .		0