Yu-Kun Lai

List of Publications by Year
in descending order

122 papers	3,409 citations	270111 25 h-index	252626 46 g-index
124 all docs	124 docs citations	124 times ranked	2788 citing authors

#	Article	IF	Citations
1	Multiscale Mesh Deformation Component Analysis With Attention-Based Autoencoders. IEEE Transactions on Visualization and Computer Graphics, 2023, 29, 1301-1317.	2.9	4
2	3D-CariGAN: An End-to-End Solution to 3D Caricature Generation From Normal Face Photos. IEEE Transactions on Visualization and Computer Graphics, 2023, 29, 2203-2210.	2.9	8
3	Quality Metric Guided Portrait Line Drawing Generation From Unpaired Training Data. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2023, 45, 905-918.	9.7	11
4	Reference-Based Deep Line Art Video Colorization. IEEE Transactions on Visualization and Computer Graphics, 2023, 29, 2965-2979.	2.9	6
5	DSG-Net: Learning Disentangled Structure and Geometry for 3D Shape Generation. ACM Transactions on Graphics, 2023, 42, 1-17.	4.9	9
6	Learning on 3D Meshes With Laplacian Encoding and Pooling. IEEE Transactions on Visualization and Computer Graphics, 2022, 28, 1317-1327.	2.9	14
7	Variational Autoencoders for Localized Mesh Deformation Component Analysis. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2022, 44, 6297-6310.	9.7	5
8	Hierarchical Reinforcement Learning With Universal Policies for Multistep Robotic Manipulation. IEEE Transactions on Neural Networks and Learning Systems, 2022, 33, 4727-4741.	7.2	20
9	E-ffective: A Visual Analytic System for Exploring the Emotion and Effectiveness of Inspirational Speeches. IEEE Transactions on Visualization and Computer Graphics, 2022, 28, 508-517.	2.9	6
10	GAN-Based Multi-Style Photo Cartoonization. IEEE Transactions on Visualization and Computer Graphics, 2022, 28, 3376-3390.	2.9	7
11	A Deep Learning Driven Active Framework for Segmentation of Large 3D Shape Collections. CAD Computer Aided Design, 2022, 144, 103179.	1.4	3
12	NPRportrait 1.0: A three-level benchmark for non-photorealistic rendering of portraits. Computational Visual Media, 2022, 8, 445-465.	10.8	4
13	SceneSketcher-v2: Fine-Grained Scene-Level Sketch-Based Image Retrieval Using Adaptive GCNs. IEEE Transactions on Image Processing, 2022, 31, 3737-3751.	6.0	5
14	SketchMaker: Sketch Extraction and Reuse for Interactive Scene Sketch Composition. ACM Transactions on Interactive Intelligent Systems, 2022, 12, 1-26.	2.6	3
15	A review of image and video colorization: From analogies to deep learning. Visual Informatics, 2022, 6, 51-68.	2.5	10
16	Line Drawings for Face Portraits From Photos Using Global and Local Structure Based GANs. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2021, 43, 3462-3475.	9.7	16
17	Active Arrangement of Small Objects in 3D Indoor Scenes. IEEE Transactions on Visualization and Computer Graphics, 2021, 27, 2250-2264.	2.9	0
18	Content-Preserving Image Stitching With Piecewise Rectangular Boundary Constraints. IEEE Transactions on Visualization and Computer Graphics, 2021, 27, 3198-3212.	2.9	23

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19	BiSPL: Bidirectional Self-Paced Learning for Recognition From Web Data. IEEE Transactions on Image Processing, 2021, 30, 6512-6527.	6.0	5
20	ClusterSLAM: A SLAM backend for simultaneous rigid body clustering and motion estimation. Computational Visual Media, 2021, 7, 87-101.	10.8	9
21	Sparse Data Driven Mesh Deformation. IEEE Transactions on Visualization and Computer Graphics, 2021, 27, 2085-2100.	2.9	40
22	Vote-Based 3D Object Detection with Context Modeling and SOB-3DNMS. International Journal of Computer Vision, 2021, 129, 1857-1874.	10.9	16
23	A Revisit of Shape Editing Techniques: From the Geometric to the Neural Viewpoint. Journal of Computer Science and Technology, 2021, 36, 520-554.	0.9	11
24	Augmented Reality Glasses as an Orientation and Mobility Aid for People with Low Vision: a Feasibility Study of Experiences and Requirements. , 2021, , .		12
25	PRS-Net: Planar Reflective Symmetry Detection Net for 3D Models. IEEE Transactions on Visualization and Computer Graphics, 2021, 27, 3007-3018.	2.9	25
26	LinkNet: 2D-3D linked multi-modal network for online semantic segmentation of RGB-D videos. Computers and Graphics, 2021, 98, 37-47.	1.4	7
27	Image-Guided Human Reconstruction via Multi-Scale Graph Transformation Networks. IEEE Transactions on Image Processing, 2021, 30, 5239-5251.	6.0	7
28	APSE: Attention-Aware Polarity-Sensitive Embedding for Emotion-Based Image Retrieval. IEEE Transactions on Multimedia, 2021, 23, 4469-4482.	5.2	8
29	MW-GAN: Multi-Warping GAN for Caricature Generation With Multi-Style Geometric Exaggeration. IEEE Transactions on Image Processing, 2021, 30, 8644-8657.	6.0	6
30	An Open-Source Multi-goal Reinforcement Learning Environment forÂRobotic Manipulation with Pybullet. Lecture Notes in Computer Science, 2021, , 14-24.	1.0	6
31	Single Image 3D Shape Retrieval via Cross-Modal Instance and Category Contrastive Learning. , 2021, , .		10
32	TM-NET. ACM Transactions on Graphics, 2021, 40, 1-15.	4.9	13
33	Semantic Labeling and Instance Segmentation of 3D Point Clouds Using Patch Context Analysis and Multiscale Processing. IEEE Transactions on Visualization and Computer Graphics, 2020, 26, 2485-2498.	2.9	36
34	Adaptive gradient-based block compressive sensing with sparsity for noisy images. Multimedia Tools and Applications, 2020, 79, 14825-14847.	2.6	10
35	Spatio-Temporal Reconstruction for 3D Motion Recovery. IEEE Transactions on Circuits and Systems for Video Technology, 2020, 30, 1583-1596.	5.6	9
36	WSCNet: Weakly Supervised Coupled Networks for Visual Sentiment Classification and Detection. IEEE Transactions on Multimedia, 2020, 22, 1358-1371.	5.2	61

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37	Automatic semantic style transfer using deep convolutional neural networks and soft masks. Visual Computer, 2020, 36, 1307-1324.	2.5	36
38	HeteroFusion: Dense Scene Reconstruction Integrating Multi-Sensors. IEEE Transactions on Visualization and Computer Graphics, 2020, 26, 3217-3230.	2.9	12
39	Ranking-Preserving Cross-Source Learning for Image Retargeting Quality Assessment. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2020, 42, 1798-1805.	9.7	7
40	Structure-Preserving Neural Style Transfer. IEEE Transactions on Image Processing, 2020, 29, 909-920.	6.0	59
41	SHREC 2020: Multi-domain protein shape retrieval challenge. Computers and Graphics, 2020, 91, 189-198.	1.4	14
42	Ability of Head-Mounted Display Technology to Improve Mobility in People With Low Vision: A Systematic Review. Translational Vision Science and Technology, 2020, 9, 26.	1.1	20
43	Mesh Variational Autoencoders with Edge Contraction Pooling. , 2020, , .		16
44	SHRECâ€™20: Shape correspondence with non-isometric deformations. Computers and Graphics, 2020, 92, 28-43.	1.4	23
45	PoNA: Pose-Guided Non-Local Attention for Human Pose Transfer. IEEE Transactions on Image Processing, 2020, 29, 9584-9599.	6.0	37
46	3D computational modeling and perceptual analysis of kinetic depth effects. Computational Visual Media, 2020, 6, 265-277.	10.8	2
47	Unpaired Portrait Drawing Generation via Asymmetric Cycle Mapping. , 2020, , .		40
48	Simultaneous Multiâ€Attribute Imageâ€toâ€Image Translation Using Parallel Latent Transform Networks. Computer Graphics Forum, 2020, 39, 531-542.	1.8	1
49	Learning to Reconstruct and Understand Indoor Scenes From Sparse Views. IEEE Transactions on Image Processing, 2020, 29, 5753-5766.	6.0	2
50	A survey on deep geometry learning: From a representation perspective. Computational Visual Media, 2020, 6, 113-133.	10.8	66
51	Sparse Graph Regularized Mesh Color Edit Propagation. IEEE Transactions on Image Processing, 2020, 29, 5408-5419.	6.0	3
52	Feature-Aware Uniform Tessellations on Video Manifold for Content-Sensitive Supervoxels. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2020, 43, 1-1.	9.7	5
53	Automatic 3D tooth segmentation using convolutional neural networks in harmonic parameter space. Graphical Models, 2020, 109, 101071.	1.1	18
54	Synthesizing Mesh Deformation Sequences with Bidirectional LSTM. IEEE Transactions on Visualization and Computer Graphics, 2020, PP, 1-1.	2.9	1

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55	SceneSketcher: Fine-Grained Image Retrieval with Scene Sketches. Lecture Notes in Computer Science, 2020, , 718-734.	1.0	18
56	A REVIEW OF IMAGE COLOURISATION. , 2020, , 139-157.		4
57	Robust Non-Rigid Registration with Reweighted Position and Transformation Sparsity. IEEE Transactions on Visualization and Computer Graphics, 2019, 25, 2255-2269.	2.9	20
58	Probabilistic Projective Association and Semantic Guided Relocalization for Dense Reconstruction. , 2019, , .		8
59	Human action recognition using graph matching. AIP Conference Proceedings, 2019, , .	0.3	5
60	Deep point-based scene labeling with depth mapping and geometric patch feature encoding. Graphical Models, 2019, 104, 101033.	1.1	5
61	A New Learning Approach to Malware Classification Using Discriminative Feature Extraction. IEEE Access, 2019, 7, 13015-13023.	2.6	35
62	Image Neural Style Transfer With Global and Local Optimization Fusion. IEEE Access, 2019, 7, 85573-85580.	2.6	20
63	Data-driven weight optimization for real-time mesh deformation. Graphical Models, 2019, 104, 101037.	1.1	4
64	Stereoscopic image stitching with rectangular boundaries. Visual Computer, 2019, 35, 823-835.	2.5	7
65	Stylistic scene enhancement GAN: mixed stylistic enhancement generation for 3D indoor scenes. Visual Computer, 2019, 35, 1157-1169.	2.5	25
66	Consistent segment-wise matching with multi-layer graphs. Computer Aided Geometric Design, 2019, 70, 31-45.	0.5	0
67	Block Compressive Sensing for Solder Joint Images With Wavelet Packet Thresholding. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2019, 9, 1190-1199.	1.4	6
68	Global 3D Non-Rigid Registration of Deformable Objects Using a Single RGB-D Camera. IEEE Transactions on Image Processing, 2019, 28, 4746-4761.	6.0	11
69	Automatic Example-Based Image Colorization Using Location-Aware Cross-Scale Matching. IEEE Transactions on Image Processing, 2019, 28, 4606-4619.	6.0	37
70	VV-Net: Voxel VAE Net With Group Convolutions for Point Cloud Segmentation. , 2019, , .		114
71	IP102: A Large-Scale Benchmark Dataset for Insect Pest Recognition. , 2019, , .		157
72	APDrawingGAN: Generating Artistic Portrait Drawings From Face Photos With Hierarchical GANs. , 2019, , .		93

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73	Attention-Aware Polarity Sensitive Embedding for Affective Image Retrieval. , 2019, , .		23
74	SDM-NET. ACM Transactions on Graphics, 2019, 38, 1-15.	4.9	123
75	Geometric and Semantic Modeling from RGB-D Data. Advances in Computer Vision and Pattern Recognition, 2019, , 267-282.	0.9	1
76	Robust Virtual Unrolling of Historical Parchment XMT Images. IEEE Transactions on Image Processing, 2018, 27, 1914-1926.	6.0	11
77	Knowledge graph construction with structure and parameter learning for indoor scene design. Computational Visual Media, 2018, 4, 123-137.	10.8	31
78	CartoonGAN: Generative Adversarial Networks for Photo Cartoonization. , 2018, , .		221
79	Weakly Supervised Coupled Networks for Visual Sentiment Analysis. , 2018, , .		95
80	Variational Autoencoders for Deforming 3D Mesh Models. , 2018, , .		109
81	Evaluation on the Compactness of Supervoxels. , 2018, , .		2
82	Content-Sensitive Supervoxels via Uniform Tessellations on Video Manifolds. , 2018, , .		6
83	Real-Time 3D Face Reconstruction and Gaze Tracking for Virtual Reality. , 2018, , .		8
84	Sparse MDMO: Learning a Discriminative Feature for Spontaneous Micro-Expression Recognition. IEEE Transactions on Affective Computing, 2018, , 1-1.	5.7	42
85	Recognition From Web Data: A Progressive Filtering Approach. IEEE Transactions on Image Processing, 2018, 27, 5303-5315.	6.0	27
86	Virtual Recovery of Content from X-Ray Micro-Tomography Scans of Damaged Historic Scrolls. Scientific Reports, 2018, 8, 11901.	1.6	20
87	Biharmonic deformation transfer with automatic key point selection. Graphical Models, 2018, 98, 1-13.	1.1	20
88	Automatic unpaired shape deformation transfer. ACM Transactions on Graphics, 2018, 37, 1-15.	4.9	44
89	Rigidity controllable as-rigid-as-possible shape deformation. Graphical Models, 2017, 91, 13-21.	1.1	18
90	A Survey on Human Performance Capture and Animation. Journal of Computer Science and Technology, 2017, 32, 536-554.	0.9	51

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91	Dataâ€Driven Shape Interpolation and Morphing Editing. Computer Graphics Forum, 2017, 36, 19-31.	1.8	13
92	Example-Based Image Colorization Using Locality Consistent Sparse Representation. IEEE Transactions on Image Processing, 2017, 26, 5188-5202.	6.0	44
93	Global alignment of deformable objects captured by a single RGB-D camera. , 2017, , .		3
94	Benchmarking non-photorealistic rendering of portraits. , 2017, , .		15
95	Efficient and Flexible Deformation Representation for Data-Driven Surface Modeling. ACM Transactions on Graphics, 2016, 35, 1-17.	4.9	44
96	3D GLOH features for human action recognition. , 2016, , .		2
97	Fast capture of textured full-body avatar with RGB-D cameras. Visual Computer, 2016, 32, 681-691.	2.5	20
98	SPA: Sparse Photorealistic Animation Using a Single RGB-D Camera. IEEE Transactions on Circuits and Systems for Video Technology, 2016, , 1-1.	5.6	5
99	Saliency guided local and global descriptors for effective action recognition. Computational Visual Media, 2016, 2, 97-106.	10.8	47
100	Semantic Retrieval of Trademarks Based on Conceptual Similarity. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2016, 46, 220-233.	5.9	10
101	Robust segmentation of historical parchment XMT images for virtual unrolling. , 2015, , .		1
102	Sparse Nonâ€rigid Registration of 3D Shapes. Computer Graphics Forum, 2015, 34, 89-99.	1.8	21
103	Active Exploration of Large 3D Model Repositories. IEEE Transactions on Visualization and Computer Graphics, 2015, 21, 1390-1402.	2.9	13
104	Diffusion pruning for rapidly and robustly selecting global correspondences using local isometry. ACM Transactions on Graphics, 2014, 33, 1-17.	4.9	21
105	Automatic semantic modeling of indoor scenes from low-quality RGB-D data using contextual information. ACM Transactions on Graphics, 2014, 33, 1-12.	4.9	90
106	Artistic rendering enhancing global structure. Visual Computer, 2014, 30, 1179-1193.	2.5	0
107	Virtual unrolling and information recovery from scanned scrolled historical documents. Pattern Recognition, 2014, 47, 248-259.	5.1	34
108	An Efficient Approach to Correspondences between Multiple Nonâ€Rigid Parts. Computer Graphics Forum, 2014, 33, 137-146.	1.8	4

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109	A Data-Driven Approach to Efficient Character Articulation. , 2013, , .		3
110	Registration of 3D Point Clouds and Meshes: A Survey from Rigid to Nonrigid. IEEE Transactions on Visualization and Computer Graphics, 2013, 19, 1199-1217.	2.9	465
111	Non-photorealistic rendering with spot colour. , 2013, , .		3
112	A Dataâ€Ðriven Approach to Realistic Shape Morphing. Computer Graphics Forum, 2013, 32, 449-457.	1.8	24
113	L p shape deformation. Science China Information Sciences, 2012, 55, 983-993.	2.7	17
114	Harmonic Field Based Volume Model Construction from Triangle Soup. Journal of Computer Science and Technology, 2010, 25, 562-571.	0.9	4
115	Towards artistic minimal rendering. , 2010, , .		15
116	Metric-Driven RoSy Field Design and Remeshing. IEEE Transactions on Visualization and Computer Graphics, 2010, 16, 95-108.	2.9	46
117	Rapid and effective segmentation of 3D models using random walks. Computer Aided Geometric Design, 2009, 26, 665-679.	0.5	81
118	Stripification of Free-Form Surfaces With Global Error Bounds for Developable Approximation. IEEE Transactions on Automation Science and Engineering, 2009, 6, 700-709.	3.4	32
119	Fairing wireframes in industrial surface design. , 2008, , .		1
120	Developable Strip Approximation of Parametric Surfaces with Global Error Bounds. , 2007, , .		6
121	Robust Feature Classification and Editing. IEEE Transactions on Visualization and Computer Graphics, 2007, 13, 34-45.	2.9	92
122	Reconstructing Recognizable 3D Face Shapes based on 3D Morphable Models. Computer Graphics Forum, 0, , .	1.8	2