Kyoung Mu Lee

List of Publications by Year
in descending order

153 papers	17,357 citations	201575 27 h-index	175177 52 g-index
157 all docs	157 docs citations	157 times ranked	8590 citing authors

#	Article	IF	Citations
1	Accurate Image Super-Resolution Using Very Deep Convolutional Networks. , 2016, , .		3,923
2	Enhanced Deep Residual Networks for Single Image Super-Resolution. , 2017, , .		3,790
3	Deeply-Recursive Convolutional Network for Image Super-Resolution. , 2016, , .		1,792
4	Deep Multi-scale Convolutional Neural Network for Dynamic Scene Deblurring. , 2017, , .		1,082
5	Visual tracking decomposition. , 2010, , .		926
6	NTIRE 2017 Challenge on Single Image Super-Resolution: Methods and Results. , 2017, , .		645
7	FPGA Design and Implementation of a Real-Time Stereo Vision System. IEEE Transactions on Circuits and Systems for Video Technology, 2010, 20, 15-26.	5.6	256
8	Reweighted Random Walks for Graph Matching. Lecture Notes in Computer Science, 2010, , 492-505.	1.0	251
9	Robust Stereo Matching Using Adaptive Normalized Cross-Correlation. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2011, 33, 807-822.	9.7	215
10	Camera Distance-Aware Top-Down Approach for 3D Multi-Person Pose Estimation From a Single RGB Image. , 2019, , .		178
11	Tracking by Sampling Trackers. , 2011, , .		148
12	Depth-Based 3D Hand Pose Estimation: From Current Achievements to Future Goals. , 2018, , .		144
13	Deep vessel segmentation by learning graphical connectivity. Medical Image Analysis, 2019, 58, 101556.	7.0	140
14	I2L-MeshNet: Image-to-Lixel Prediction Network for Accurate 3D Human Pose and Mesh Estimation from a Single RGB Image. Lecture Notes in Computer Science, 2020, , 752-768.	1.0	140
15	Occlusion invariant face recognition using selective local non-negative matrix factorization basis images. Image and Vision Computing, 2008, 26, 1515-1523.	2.7	135
16	Tracking of a non-rigid object via patch-based dynamic appearance modeling and adaptive Basin Hopping Monte Carlo sampling. , 2009, , .		130
17	Segmentation-Free Dynamic Scene Deblurring. , 2014, , .		122
18	Hyper-graph matching via reweighted random walks. , 2011, , .		118

#	ARTICLE	IF	CITATIONS
19	Dynamic Scene Deblurring. , 2013, , .		115
20	V2V-PoseNet: Voxel-to-Voxel Prediction Network for Accurate 3D Hand and Human Pose Estimation from a Single Depth Map. , 2018, , .		109
21	Joint Weakly and Semi-Supervised Deep Learning for Localization and Classification of Masses in Breast Ultrasound Images. IEEE Transactions on Medical Imaging, 2019, 38, 762-774.	5.4	107
22	Online Video Deblurring via Dynamic Temporal Blending Network. , 2017, , .		95
23	Learning Full Pairwise Affinities for Spectral Segmentation. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2013, 35, 1690-1703.	9.7	91
24	Generalized video deblurring for dynamic scenes. , 2015, , .		85
25	Tracking by Sampling and IntegratingMultiple Trackers. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2014, 36, 1428-1441.	9.7	84
26	Generative Image Segmentation Using Random Walks with Restart. Lecture Notes in Computer Science, 2008, , 264-275.	1.0	83
27	Joint Depth Map and Color Consistency Estimation for Stereo Images with Different Illuminations and Cameras. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2013, 35, 1094-1106.	9.7	79
28	Robust Light Field Depth Estimation Using Occlusion-Noise Aware Data Costs. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2018, 40, 2484-2497.	9.7	79
29	Fusion of Lidar and Imagery for Reliable Building Extraction. Photogrammetric Engineering and Remote Sensing, 2008, 74, 215-225.	0.3	76
30	Highly Nonrigid Object Tracking via Patch-Based Dynamic Appearance Modeling. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2013, 35, 2427-2441.	9.7	74
31	Look Wider to Match Image Patches With Convolutional Neural Networks. IEEE Signal Processing Letters, 2017, 24, 1788-1792.	2.1	73
32	Shape from Shading with a Generalized Reflectance Map Model. Computer Vision and Image Understanding, 1997, 67, 143-160.	3.0	72
33	Deep Meta Learning for Real-Time Target-Aware Visual Tracking. , 2019, , .		72
34	Visual SLAM with Line and Corner Features. , 2006, , .		67
35	A Dense Stereo Matching Using Two-Pass Dynamic Programming with Generalized Ground Control Points. , 0, , .		58
36	Recognition of 2D Object Contours Using Starting-Point-Independent Wavelet Coefficient Matching. Journal of Visual Communication and Image Representation, 1998, 9, 171-181.	1.7	55

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37	Multi-modal/multi-scale convolutional neural network based in-loop filter design for next generation video codec. , 2017, , .		55
38	Wang-Landau Monte Carlo-Based Tracking Methods for Abrupt Motions. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2013, 35, 1011-1024.	9.7	54
39	Learning to Forget for Meta-Learning. , 2020, , .		54
40	CV-SLAM: a new ceiling vision-based SLAM technique. , 2005, , .		51
41	Tracking of Abrupt Motion Using Wang-Landau Monte Carlo Estimation. Lecture Notes in Computer Science, 2008, , 387-400.	1.0	51
42	Visual tracking via geometric particle filtering on the affine group with optimal importance functions. , 2009, , .		50
43	A Geometric Particle Filter for Template-Based Visual Tracking. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2014, 36, 625-643.	9.7	48
44	Learning full pairwise affinities for spectral segmentation. , 2010, , .		47
45	Nonparametric higher-order learning for interactive segmentation. , 2010, , .		46
46	Task-Aware Image Downscaling. Lecture Notes in Computer Science, 2018, , 419-434.	1.0	46
47	Ghost-Free High Dynamic Range Imaging. Lecture Notes in Computer Science, 2011, , 486-500.	1.0	42
48	Unsupervised detection and segmentation of identical objects. , 2010, , .		40
49	Dynamic Video Deblurring Using a Locally Adaptive Blur Model. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2018, 40, 2374-2387.	9.7	39
50	Discrete Tabu Search for Graph Matching. , 2015, , .		37
51	Joint Estimation of Camera Pose, Depth, Deblurring, and Super-Resolution from a Blurred Image Sequence. , 2017, , .		37
52	Simultaneous localization, mapping and deblurring. , 2011, , .		36
53	Real-time visual tracking by deep reinforced decision making. Computer Vision and Image Understanding, 2018, 171, 10-19.	3.0	36
54	Recognition of partially occluded objects using probabilistic ARG (attributed relational graph)-based matching. Computer Vision and Image Understanding, 2003, 90, 217-241.	3.0	35

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55	Co-recognition of Image Pairs by Data-Driven Monte Carlo Image Exploration. Lecture Notes in Computer Science, 2008, , 144-157.	1.0	33
56	A Line Feature Matching Technique Based on an Eigenvector Approach. Computer Vision and Image Understanding, 2000, 77, 263-283.	3.0	31
57	Feature correspondence and deformable object matching via agglomerative correspondence clustering. , 2009, , .		30
58	A Graph Matching Algorithm Using Data-Driven Markov Chain Monte Carlo Sampling. , 2010, , .		28
59	Tensor-Based High-Order Semantic Relation Transfer for Semantic Scene Segmentation. , 2013, , .		28
60	Optical Flow via Locally Adaptive Fusion of Complementary Data Costs. , 2013, , .		28
61	Graph Matching via Sequential Monte Carlo. Lecture Notes in Computer Science, 2012, , 624-637.	1.0	25
62	Mutual information-based stereo matching combined with SIFT descriptor in log-chromaticity color space. , 2009, , .		23
63	GPU-friendly multi-view stereo reconstruction using surfel representation and graph cuts. Computer Vision and Image Understanding, 2011, 115, 620-634.	3.0	21
64	A Unified Framework for Event Summarization and Rare Event Detection from Multiple Views. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2015, 37, 1737-1750.	9.7	21
65	Joint segmentation and classification of hepatic lesions in ultrasound images using deep learning. European Radiology, 2021, 31, 8733-8742.	2.3	21
66	Color-Based Image Retrieval Using Perceptually Modified Hausdorff Distance. Eurasip Journal on Image and Video Processing, 2008, 2008, 1-10.	1.7	20
67	Multi-robot SLAM using ceiling vision. , 2009, , .		20
68	Multiview normal field integration using level set methods. , 2007, , .		19
69	Simultaneous Depth Reconstruction and Restoration of Noisy Stereo Images using Non-local Pixel Distribution. , 2007, , .		19
70	Illumination and camera invariant stereo matching. , 2008, , .		19
71	Stereo Matching Using Population-Based MCMC. International Journal of Computer Vision, 2009, 83, 195-209.	10.9	18
72	Progressive graph matching: Making a move of graphs via probabilistic voting. , 2012, , .		18

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73	Monocular SLAM with locally planar landmarks via geometric rao-blackwellized particle filtering on Lie groups. , 2010, , .		17
74	Model-Based Object Recognition Using Geometric Invariants of Points and Lines. Computer Vision and Image Understanding, 2001, 84, 361-383.	3.0	16
75	Edge-preserving colorization using data-driven Random Walks with Restart. , 2009, , .		16
76	SRWarp: Generalized Image Super-Resolution under Arbitrary Transformation. , 2021, , .		16
77	Shape from Photometric Ratio and Stereo. Journal of Visual Communication and Image Representation, 1996, 7, 155-162.	1.7	15
78	Subgraph matching using compactness prior for robust feature correspondence. , 2015, , .		14
79	2D–3D pose consistency-based conditional random fields for 3D human pose estimation. Computer Vision and Image Understanding, 2018, 169, 52-61.	3.0	14
80	SeedNet: Automatic Seed Generation with Deep Reinforcement Learning for Robust Interactive Segmentation. , 2018, , .		14
81	SPNet: Deep 3D Object Classification and Retrieval Using Stereographic Projection. Lecture Notes in Computer Science, 2019, , 691-706.	1.0	14
82	Robust visual tracking using autoregressive hidden Markov Model. , 2012, , .		13
83	Large margin learning of hierarchical semantic similarity for image classification. Computer Vision and Image Understanding, 2015, 132, 3-11.	3.0	13
84	Depth Estimation Network for Dual Defocused Images with Different Depth-of-Field. , 2018, , .		13
85	Adaptive Visual Tracking with Minimum Uncertainty Gap Estimation. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2017, 39, 18-31.	9.7	12
86	AIM 2019 Challenge on Video Temporal Super-Resolution: Methods and Results. , 2019, , .		12
87	Abnormal Object Detection by Canonical Scene-Based Contextual Model. Lecture Notes in Computer Science, 2012, , 651-664.	1.0	12
88	Mode-seeking on graphs via random walks. , 2012, , .		11
89	Minimum Uncertainty Gap for Robust Visual Tracking. , 2013, , .		11
90	Toward Real-World Super-Resolution via Adaptive Downsampling Models. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2022, 44, 8657-8670.	9.7	11

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91	DynaVSR: Dynamic Adaptive Blind Video Super-Resolution. , 2021, , .		11
92	Joint Blind Motion Deblurring and Depth Estimation of Light Field. Lecture Notes in Computer Science, 2018, , 300-316.	1.0	11
93	DAQ: Channel-Wise Distribution-Aware Quantization for Deep Image Super-Resolution Networks. , 2022, , .		11
94	Adaptive rate control algorithms for low bit rate video under networks supporting bandwidth renegotiation. Signal Processing: Image Communication, 2002, 17, 759-779.	1.8	10
95	A unified framework for event summarization and rare event detection. , 2012, , .		10
96	Deep recurrent resnet for video super-resolution. , 2017, , .		10
97	Robust Visual Tracking with Double Bounding Box Model. Lecture Notes in Computer Science, 2014, , 377-392.	1.0	10
98	Perceptual grouping of line features in 3-D space: a model-based framework. Pattern Recognition, 2004, 37, 145-159.	5.1	9
99	MAP-MRF approach for binarization of degraded document image. , 2008, , .		8
100	Learning object relationships via graph-based context model. , 2012, , .		8
101	Stereo Matching Using Population-Based MCMC. Lecture Notes in Computer Science, 2007, , 560-569.	1.0	8
102	Toward Global Minimum through Combined Local Minima. Lecture Notes in Computer Science, 2008, , 298-311.	1.0	8
103	Shape from shading using graph cuts. Pattern Recognition, 2008, 41, 3749-3757.	5.1	7
104	Markov Chain Monte Carlo combined with deterministic methods for Markov random field optimization. , 2009, , .		7
105	Stereo reconstruction using high order likelihood. , 2011, , .		7
106	Geometric particle swarm optimization for robust visual ego-motion estimation via particle filtering. Image and Vision Computing, 2013, 31, 565-579.	2.7	7
107	Interval Tracker: Tracking by Interval Analysis. , 2014, , .		7
108	Window Annealing over Square Lattice Markov Random Field. Lecture Notes in Computer Science, 2008, , 307-320.	1.0	7

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109	Efficient Measurement of Shape Dissimilarity between 3D Models Using Z-Buffer and Surface Roving Method. Eurasip Journal on Advances in Signal Processing, 2002, 2002, 1.	1.0	6
110	Stereo matching using iterative reliable disparity map expansion in the color–spatial–disparity space. Pattern Recognition, 2007, 40, 3705-3713.	5.1	6
111	Multi-object reconstruction from dynamic scenes: An object-centered approach. Computer Vision and Image Understanding, 2013, 117, 1575-1588.	3.0	6
112	Stereo reconstruction using high-order likelihoods. Computer Vision and Image Understanding, 2014, 125, 223-236.	3.0	6
113	A New Similarity Measure for Random Signatures: Perceptually Modified Hausdorff Distance. Lecture Notes in Computer Science, 2006, , 990-1001.	1.0	6
114	A Novel Cascade Classifier for Automatic Microcalcification Detection. PLoS ONE, 2015, 10, e0143725.	1.1	6
115	Multi-image matching for a general motion stereo camera model. Pattern Recognition, 2001, 34, 1701-1712.	5.1	5
116	Simultaneous color consistency and depth map estimation for radiometrically varying stereo images. , 2009, , .		5
117	A hybrid approach for MRF optimization problems: Combination of stochastic sampling and deterministic algorithms. Computer Vision and Image Understanding, 2011, 115, 1623-1637.	3.0	5
118	Triplanar convolution with shared 2D kernels for 3D classification and shape retrieval. Computer Vision and Image Understanding, 2020, 193, 102901.	3.0	5
119	Topology-Aware Retinal Artery–Vein Classification via Deep Vascular Connectivity Prediction. Applied Sciences (Switzerland), 2021, 11, 320.	1.3	5
120	3D target recognition based on projective invariant relationships. Journal of Visual Communication and Image Representation, 2003, 14, 1-21.	1.7	4
121	A Unified Probabilistic Approach to Feature Matching and Object Segmentation. , 2010, , .		4
122	Bi-Directional Seed Attention Network for Interactive Image Segmentation. IEEE Signal Processing Letters, 2020, 27, 1540-1544.	2.1	4
123	A New 3-D Model Retrieval System Based on Aspect-Transition Descriptor. Lecture Notes in Computer Science, 2006, , 543-554.	1.0	4
124	Partially Occluded Object-Specific Segmentation in View-Based Recognition. , 2007, , .		3
125	Segment-based Foreground Object Disparity Estimation Using Zcam and Multiple-View Stereo. , 2008, , .		3
126	Multiswarm Particle Filter for vision based SLAM. , 2009, , .		3

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127	Visual tracking using the joint inference of target state and segment-based appearance models. , 2013, , .		3
128	Learning to Forget for Meta-Learning via Task-and-Layer-Wise Attenuation. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2022, 44, 7718-7730.	9.7	3
129	Test-Time Adaptation for Video Frame Interpolation via Meta-Learning. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2022, 44, 9615-9628.	9.7	3
130	Searching for Controllable Image Restoration Networks. , 2021, , .		3
131	Stereo Matching Using Scanline Disparity Discontinuity Optimization. Lecture Notes in Computer Science, 2006, , 588-597.	1.0	2
132	A Probabilistic Model for Correspondence Problems Using Random Walks with Restart. Lecture Notes in Computer Science, 2010, , 416-425.	1.0	2
133	Alpha Matting of Motion-Blurred Objects in Bracket Sequence Images. Lecture Notes in Computer Science, 2014, , 125-139.	1.0	2
134	Visual Tracking by Adaptive Continual Meta-Learning. IEEE Access, 2022, 10, 9022-9035.	2.6	2
135	Progressive encoding of binary voxel models using pyramidal decomposition. Journal of Visual Communication and Image Representation, 2004, 15, 44-64.	1.7	1
136	Window annealing for pixel-labeling problems. Computer Vision and Image Understanding, 2013, 117, 289-303.	3.0	1
137	Interactive segmentation with seed expansion. , 2014, , .		1
138	Random forest with data ensemble for saliency detection. , 2015, , .		1
139	Image Segmentation by Edge Partitioning over a Nonsubmodular Markov Random Field. Mathematical Problems in Engineering, 2015, 2015, 1-9.	0.6	1
140	Depth maps and high-dynamic range image generation from alternating exposure multiview images. Journal of Electronic Imaging, 2017, 26, 043006.	0.5	1
141	A New Stereo Matching Model Using Visibility Constraint Based on Disparity Consistency. Lecture Notes in Computer Science, 2006, , 598-609.	1.0	1
142	OBJECT CORRESPONDENCE NETWORKS FOR UNSUPERVISED RECOGNITION OF IDENTICAL OBJECTS. Series in Computer Vision, 2011, , 313-334.	0.1	1
143	Face Detection Using a First-Order RCE Classifier. Eurasip Journal on Advances in Signal Processing, 2003, 2003, 1.	1.0	0
144	DOOMRED: A New Optimization Technique for Boosted Cascade Detectors on Enforced Training Set. Eurasip Journal on Advances in Signal Processing, 2008, 2008, .	1.0	0

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145	Scanline Sampler without Detailed Balance: An Efficient MCMC for MRF Optimization. , 2014, , .		0
146	MRF optimization by graph approximation. , 2015, , .		0
147	Scale-change aware locally adaptive optical flow. , 2016, , .		0
148	Appearance dependent inter-part relationship for human pose estimation. , 2016, , .		0
149	Structure-Resonant Discriminator for Image Super-Resolution. , 2021, , .		0
150	Image Super-Resolution. , 2021, , 1-5.		0
151	Image Super-Resolution. , 2021, , 646-650.		0
152	A Novel Stochastic Attributed Relational Graph Matching Based on Relation Vector Space Analysis. Lecture Notes in Computer Science, 2006, , 978-989.	1.0	0
153	Co-recognition of Images and Videos: Unsupervised Matching of Identical Object Patterns and Its Applications. , 2013, , 113-141.		0