Carsten Rother

List of Publications by Year
in descending order

39
papers	9,658
citations	471509
17
h-index	752698
20
g-index
40
all docs	40
docs citations	40
times ranked	6585
citing authors

#	Article	IF	Citations
1	"GrabCut". ACM Transactions on Graphics, 2004, 23, 309-314.	7.2	4,173
2	TextonBoost for Image Understanding: Multi-Class Object Recognition and Segmentation by Jointly Modeling Texture, Layout, and Context. International Journal of Computer Vision, 2009, 81, 2-23.	15.6	914
3	A Comparative Study of Energy Minimization Methods for Markov Random Fields with Smoothness-Based Priors. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2008, 30, 1068-1080.	13.9	786
4	PatchMatch Stereo - Stereo Matching with Slanted Support Windows. , 2011, , .		424
5	Optimizing Binary MRFs via Extended Roof Duality. , 2007, , .		299
6	Minimizing Nonsubmodular Functions with Graph Cuts-A Review. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2007, 29, 1274-1279.	13.9	276
7	Augmented Reality Meets Computer Vision: Efficient Data Generation for Urban Driving Scenes. International Journal of Computer Vision, 2018, 126, 961-972.	15.6	258
8	A global sampling method for alpha matting. , 2011, , .		219
9	A new approach to vanishing point detection in architectural environments. Image and Vision Computing, 2002, 20, 647-655.	4.5	189
10	Fusion Moves for Markov Random Field Optimization. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2010, 32, 1392-1405.	13.9	166
11	Neural-Guided RANSAC: Learning Where to Sample Model Hypotheses. , 2019, , .		160
12	Geodesic image and video editing. ACM Transactions on Graphics, 2010, 29, 1-15.	7.2	143
13	PMBP: PatchMatch Belief Propagation for Correspondence Field Estimation. International Journal of Computer Vision, 2014, 110, 2-13.	15.6	130
14	AutoCollage. ACM Transactions on Graphics, 2006, 25, 847-852.	7.2	129
15	A Comparative Study of Modern Inference Techniques for Structured Discrete Energy Minimization Problems. International Journal of Computer Vision, 2015, 115, 155-184.	15.6	125
16	Object stereo — Joint stereo matching and object segmentation. , 2011, , .		115
17	FusionFlow: Discrete-continuous optimization for optical flow estimation. , 2008, , .		110
18	A Comparative Study of Modern Inference Techniques for Discrete Energy Minimization Problems. , 2013, , .		107

#	ARTICLE	IF	CITATIONS
19	Minimizing sparse higher order energy functions of discrete variables. , 2009, , .		104
20	Detecting unexpected obstacles for self-driving cars: Fusing deep learning and geometric modeling. , 2017, , .		94
21	Bounding Boxes, Segmentations and Object Coordinates: How Important is Recognition for 3D Scene Flow Estimation in Autonomous Driving Scenarios?. , 2017, , .		94
22	Joint Graph Decomposition & Node Labeling: Problem, Algorithms, Applications. , 2017, , .		78
23	Decision tree fields. , 2011, , .		77
24	Probabilistic fusion of stereo with color and contrast for bilayer segmentation. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2006, 28, 1480-1492.	13.9	74
25	A Dual Decomposition Approach to Feature Correspondence. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2013, 35, 259-271.	13.9	74
26	Linear Multi View Reconstruction and Camera Recovery Using a Reference Plane. International Journal of Computer Vision, 2002, 49, 117-141.	15.6	53
27	Dense Semantic Image Segmentation with Objects and Attributes. , 2014, , .		43
28	Scene Carving: Scene Consistent Image Retargeting. Lecture Notes in Computer Science, 2010, , 143-156.	1.3	43
29	Analyzing modular CNN architectures for joint depth prediction and semantic segmentation. , 2017, , .		41
30	Comparison of Energy Minimization Algorithms for Highly Connected Graphs. Lecture Notes in Computer Science, 2006, , 1-15.	1.3	31
31	Transforming Image Completion. , 2011, , .		29
32	A Study of Lagrangean Decompositions and Dual Ascent Solvers for Graph Matching. , 2017, , .		24
33	Inferring M-Best Diverse Labelings in a Single One. , 2015, , .		15
34	Discrete-Continuous Optimization for Optical Flow Estimation. Lecture Notes in Computer Science, 2009, , 1-22.	1.3	11
35	Geometric Image Synthesis. Lecture Notes in Computer Science, 2019, , 85-100.	1.3	9
36	MPLP++: Fast, Parallel Dual Block-Coordinate Ascent for Dense Graphical Models. Lecture Notes in Computer Science, 2018, , 264-281.	1.3	7

#	Article	IF	Citations
37	Crowd sourcing image segmentation with iaSTAPLE. , 2017, , .		6
38	Fusion Moves for Graph Matching. , 2021, , .		3
39	Intrinsic Autoencoders for Joint Deferred Neural Rendering and Intrinsic Image Decomposition. , 2020, , .		2