Bastian Leibe

List of Publications by Year
in descending order

128 papers	11,583 citations	186265 28 h-index	223800 46 g-index
132 all docs	132 docs citations	132 times ranked	6742 citing authors

#	Article	IF	Citations
1	Robust Object Detection with Interleaved Categorization and Segmentation. International Journal of Computer Vision, 2008, 77, 259-289.	15.6	794
2	Pedestrian Detection in Crowded Scenes. , 0, , .		531
3	Online Multiperson Tracking-by-Detection from a Single, Uncalibrated Camera. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2011, 33, 1820-1833.	13.9	494
4	A mobile vision system for robust multi-person tracking. , 2008, , .		491
5	Analyzing appearance and contour based methods for object categorization. , 0, , .		456
6	Semi-Supervised Deep Learning for Monocular Depth Map Prediction. , 2017, , .		440
7	Robust tracking-by-detection using a detector confidence particle filter. , 2009, , .		408
8	Depth and Appearance for Mobile Scene Analysis. , 2007, , .		405
9	Superpixels: An evaluation of the state-of-the-art. Computer Vision and Image Understanding, 2018, 166, 1-27.	4.7	360
10	Fast image-based localization using direct 2D-to-3D matching. , 2011, , .		337
11	HOTA: A Higher Order Metric for Evaluating Multi-object Tracking. International Journal of Computer Vision, 2021, 129, 548-578.	15.6	314
12	Coupled Object Detection and Tracking from Static Cameras and Moving Vehicles. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2008, 30, 1683-1698.	13.9	294
13	Robust Multiperson Tracking from a Mobile Platform. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2009, 31, 1831-1846.	13.9	226
14	World-scale mining of objects and events from community photo collections. , 2008, , .		210
15	Dynamic 3D Scene Analysis from a Moving Vehicle. , 2007, , .		209
16	Coupled Detection and Trajectory Estimation for Multi-Object Tracking. , 2007, , .		199
17	Image Retrieval for Image-Based Localization Revisited. , 2012, , .		193
18	3D Urban Scene Modeling Integrating Recognition andÂReconstruction. International Journal of Computer Vision, 2008, 78, 121-141.	15.6	181

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19	Fast 3D Scanning with Automatic Motion Compensation. , 2007, , .		180
20	Dense 3D semantic mapping of indoor scenes from RGB-D images. , 2014, , .		173
21	SPENCER: A Socially Aware Service Robot for Passenger Guidance and Help in Busy Airports. Springer Tracts in Advanced Robotics, 2016, , 607-622.	0.4	157
22	Exploring Spatial Context for 3D Semantic Segmentation of Point Clouds. , 2017, , .		149
23	Interleaved Object Categorization and Segmentation. , 2003, , .		143
24	Local features for object class recognition. , 2005, , .		137
25	Object Detection and Tracking for Autonomous Navigation in Dynamic Environments. International Journal of Robotics Research, 2010, 29, 1707-1725.	8.5	136
26	Towards Multi-View Object Class Detection. , 0, , .		132
27	Multiple Object Class Detection with a Generative Model. , 0, , .		131
28	Efficient Mining of Frequent and Distinctive Feature Configurations. , 2007, , .		130
29	The STRANDS Project: Long-Term Autonomy in Everyday Environments. IEEE Robotics and Automation Magazine, 2017, 24, 146-156.	2.0	126
30	The 2005 PASCAL Visual Object Classes Challenge. Lecture Notes in Computer Science, 2006, , 117-176.	1.3	125
31	Improving Image-Based Localization by Active Correspondence Search. Lecture Notes in Computer Science, 2012, , 752-765.	1.3	124
32	Real-time RGB-D based people detection and tracking for mobile robots and head-worn cameras. , 2014, , .		123
33	Person Attribute Recognition with a Jointly-Trained Holistic CNN Model. , 2015, , .		120
34	3D object recognition from range images using local feature histograms. , 0, , .		116
35	SCRAMSAC: Improving RANSAC's efficiency with a spatial consistency filter. , 2009, , .		109
36	OpenStreetSLAM: Global vehicle localization using OpenStreetMaps. , 2013, , .		102

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37	Moving obstacle detection in highly dynamic scenes. , 2009, , .		90
38	Random Forests of Local Experts for Pedestrian Detection. , 2013, , .		89
39	Integrating representative and discriminant models for object category detection. , 2005, , .		86
40	Scale-Invariant Object Categorization Using a Scale-Adaptive Mean-Shift Search. Lecture Notes in Computer Science, 2004, , 145-153.	1.3	84
41	Joint 2D-3D temporally consistent semantic segmentation of street scenes. , 2012, , .		79
42	Track to Reconstruct and Reconstruct to Track. IEEE Robotics and Automation Letters, 2020, 5, 1803-1810.	5.1	77
43	In-hand scanning with online loop closure. , 2009, , .		76
44	On multi-modal people tracking from mobile platforms in very crowded and dynamic environments. , 2016, , .		76
45	Visual Object Recognition. Synthesis Lectures on Artificial Intelligence and Machine Learning, 2011, 5, 1-181.	0.8	75
46	Efficient Clustering and Matching for Object Class Recognition. , 2006, , .		66
47	An Implicit Shape Model for Combined Object Categorization and Segmentation. Lecture Notes in Computer Science, 2006, , 508-524.	1.3	60
48	STEm-Seg: Spatio-Temporal Embeddings for Instance Segmentation in Videos. Lecture Notes in Computer Science, 2020, , 158-177.	1.3	58
49	Fast PRISM: Branch and Bound Hough Transform for Object Class Detection. International Journal of Computer Vision, 2011, 94, 175-197.	15.6	57
50	Efficient Use of Geometric Constraints for Sliding-Window Object Detection in Video. Lecture Notes in Computer Science, 2011, , 11-20.	1.3	57
51	MIND-WARPING. , 2000, , .		55
52	Dilated Point Convolutions: On the Receptive Field Size of Point Convolutions on 3D Point Clouds. , 2020, , .		53
53	MeTRAbs: Metric-Scale Truncation-Robust Heatmaps for Absolute 3D Human Pose Estimation. IEEE Transactions on Biometrics, Behavior, and Identity Science, 2021, 3, 16-30.	4.4	52
54	Multi-Aspect Detection of Articulated Objects. , 0, , .		50

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55	Multi-person Tracking with Sparse Detection and Continuous Segmentation. Lecture Notes in Computer Science, 2010, , 397-410.	1.3	49
56	The perceptive workbench: Computer-vision-based gesture tracking, object tracking, and 3D reconstruction for augmented desks. Machine Vision and Applications, 2003, 14, 59-71.	2.7	48
57	An Evaluation of Local Shape-Based Features for Pedestrian Detection. , 2005, , .		44
58	Automatic detection and tracking of pedestrians from a moving stereo rig. ISPRS Journal of Photogrammetry and Remote Sensing, 2010, 65, 523-537.	11.1	41
59	Online loop closure for real-time interactive 3D scanning. Computer Vision and Image Understanding, 2011, 115, 635-648.	4.7	41
60	Biternion Nets: Continuous Head Pose Regression from Discrete Training Labels. Lecture Notes in Computer Science, 2015, , 157-168.	1.3	41
61	Accurate and robust registration for in-hand modeling. , 2008, , .		33
62	UnOVOST: Unsupervised Offline Video Object Segmentation and Tracking. , 2020, , .		33
63	Joint Object Pose Estimation and Shape Reconstruction in Urban Street Scenes Using 3D Shape Priors. Lecture Notes in Computer Science, 2016, , 219-230.	1.3	32
64	A semantic occlusion model for human pose estimation from a single depth image. , 2015, , .		31
65	Learning semantic object parts for object categorization. Image and Vision Computing, 2008, 26, 15-26.	4.5	30
66	Discovering favorite views of popular places with iconoid shift. , 2011, , .		30
67	SIFT-Realistic Rendering. , 2013, , .		30
68	Scene flow propagation for semantic mapping and object discovery in dynamic street scenes. , 2016, , .		30
69	DROW: Real-Time Deep Learning-Based Wheelchair Detection in 2-D Range Data. IEEE Robotics and Automation Letters, 2017, 2, 585-592.	5.1	30
70	Know What Your Neighbors Do: 3D Semantic Segmentation of Point Clouds. Lecture Notes in Computer Science, 2019, , 395-409.	1.3	29
71	Toward spontaneous interaction with the Perceptive Workbench. IEEE Computer Graphics and Applications, 2000, 20, 54-65.	1.2	28
72	Level-set person segmentation and tracking with multi-region appearance models and top-down shape information. , 2011, , .		28

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73	Feature-centric Efficient Subwindow Search. , 2009, , .		26
74	Visual landmark recognition from Internet photo collections: A large-scale evaluation. Computer Vision and Image Understanding, 2015, 135, 1-15.	4.7	26
75	Taking Mobile Multi-object Tracking to the Next Level: People, Unknown Objects, and Carried Items. Lecture Notes in Computer Science, 2012, , 566-579.	1.3	26
76	The Perceptive Workbench: toward spontaneous and natural interaction in semi-immersive virtual environments. , 0, , .		25
77	Keyframe-based visual-inertial online SLAM with relocalization. , 2017, , .		25
78	Real-time multi-person tracking with detector assisted structure propagation. , 2011, , .		24
79	SAMP: Shape and Motion Priors for 4D Vehicle Reconstruction. , 2017, , .		24
80	Articulated Multi-body Tracking under Egomotion. Lecture Notes in Computer Science, 2008, , 816-830.	1.3	23
81	Deep Person Detection in Two-Dimensional Range Data. IEEE Robotics and Automation Letters, 2018, 3, 2726-2733.	5.1	21
82	3D Bird's-Eye-View Instance Segmentation. Lecture Notes in Computer Science, 2019, , 48-61.	1.3	19
83	Saliency of Interest Points under Scale Changes. , 2002, , .		19
84	Depth-From-Recognition: Inferring Meta-data by Cognitive Feedback. , 2007, , .		18
85	AlignNet-3D: Fast Point Cloud Registration of Partially Observed Objects. , 2019, , .		18
86	PRISM: PRincipled Implicit Shape Model. , 2009, , .		18
87	Close-Range Human Detection and Tracking for Head-Mounted Cameras. , 2012, , .		18
88	3D City Modeling Using Cognitive Loops. , 2006, , .		17
89	Shape-from-recognition: Recognition enables meta-data transfer. Computer Vision and Image Understanding, 2009, 113, 1222-1234.	4.7	17
90	Efficient object detection and segmentation with a cascaded Hough Forest ISM. , 2011, , .		17

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91	Towards a Principled Integration of Multi-camera Re-identification and Tracking Through Optimal Bayes Filters. , 2017, , .		17
92	Lying Pose Recognition for Elderly Fall Detection. , 0, , .		17
93	Segmentation Based Multi-Cue Integration for Object Detection. , 2006, , .		17
94	DR-SPAAM: A Spatial-Attention and Auto-regressive Model for Person Detection in 2D Range Data. , 2020, , .		17
95	Multi-scale object candidates for generic object tracking in street scenes. , 2016, , .		16
96	Probabilistic Labeling Cost for High-Accuracy Multi-view Reconstruction. , 2014, , .		15
97	Discovering Details and Scene Structure with Hierarchical Iconoid Shift. , 2013, , .		14
98	Sequence-level object candidates based on saliency for generic object recognition on mobile systems. , 2015, , .		13
99	D^{2}Conv3D: Dynamic Dilated Convolutions for Object Segmentation in Videos. , 2022, , .		13
100	Tracking People and Their Objects. , 2013, , .		12
101	Multi-Class Image Labeling with Top-Down Segmentation and Generalized Robust P^N Potentials. , 2011, , .		12
102	Measuring camera translation by the dominant apical angle. , 2008, , .		11
103	Using Multi-view Recognition and Meta-data Annotation to Guide a Robot's Attention. International Journal of Robotics Research, 2009, 28, 976-998.	8.5	11
104	Metric-Scale Truncation-Robust Heatmaps for 3D Human Pose Estimation. , 2020, , .		11
105	Real-Time Multi-Person Tracking with Time-Constrained Detection. , 2011, , .		11
106	3D Challenges and a Non-In-Depth Overview of Recent Progress. , 2007, , .		10
107	Integrating Recognition and Reconstruction for Cognitive Traffic Scene Analysis from a Moving Vehicle. Lecture Notes in Computer Science, 2006, , 192-201.	1.3	10
108	An Evaluation of Two Automatic Landmark Building Discovery Algorithms for City Reconstruction. Lecture Notes in Computer Science, 2012, , 310-323.	1.3	9

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109	Probabilistic Parameter Selection for Learning Scene Structure from Video. , 2008, , .		9
110	Towards Fast Image-Based Localization on a City-Scale. Lecture Notes in Computer Science, 2012, , 191-211.	1.3	8
111	Exploring bounding box context for multi-object tracker fusion. , 2016, , .		7
112	Incremental Model Selection for Detection and Tracking of Planar Surfaces. , 2010, , .		7
113	Semantic segmentation of modular furniture. , 2016, , .		5
114	A new approach to digitalization and data management of cultural heritage sites. , 2015, , .		3
115	Exploiting Spatial and Co-visibility Relations for Image-Based Localization. Advances in Computer Vision and Pattern Recognition, 2016, , 165-187.	1.3	3
116	Self-Supervised Person Detection in 2D Range Data using a Calibrated Camera. , 2021, , .		3
117	A flexible ASIP architecture for connected components labeling in embedded vision applications. , 2014, , .		2
118	Fixing WTFs: Detecting Image Matches Caused by Watermarks, Timestamps, and Frames in Internet Photos. , 2015, , .		2
119	Multi-band Hough Forests for detecting humans with Reflective Safety Clothing from mobile machinery. , 2015, , .		2
120	The DIRAC AWEAR audio-visual platform for detection of unexpected and incongruent events. , 2008, , .		2
121	Unsupervised Learning of Shape-Motion Patterns for Objects in Urban Street Scenes. , 2016, , .		2
122	Integration of Wireless Gesture Tracking, Object Tracking, and 3D Reconstruction in the Perceptive Workbench. Lecture Notes in Computer Science, 2001, , 73-92.	1.3	2
123	Incremental Object Discovery in Time-Varying Image Collections. , 2016, , .		1
124	Geometrically Constrained Level Set Tracking for Automotive Applications. Lecture Notes in Computer Science, 2010, , 472-482.	1.3	1
125	A flexible ASIP architecture for connected components labeling in embedded vision applications. , 2014, , .		1
126	Figure-Ground Segmentationâ€"Object-Based. , 2011, , 53-70.		0

#	ARTICLE	IF	CITATIONS
127	A fixed-dimensional 3D shape representation for matching partially observed objects in street scenes. , 2015, , .		0
128	Exploring the Combination of PReMVOS, BoLTVOS and UnOVOST for the 2019 YouTube-VOS Challenge. , 2019, , .		0