## Martial Hebert

## List of Publications by Year in descending order

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91 8,073 16 23
papers citations h-index g-index

91 91 91 5406 all docs docs citations times ranked citing authors

#	Article	IF	CITATIONS
1	Cross-Stitch Networks for Multi-task Learning. , 2016, , .		688
2	Toward Objective Evaluation of Image Segmentation Algorithms. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2007, 29, 929-944.	9.7	668
3	Recovering Surface Layout from an Image. International Journal of Computer Vision, 2007, 75, 151-172.	10.9	525
4	Putting Objects in Perspective. International Journal of Computer Vision, 2008, 80, 3-15.	10.9	446
5	PCN: Point Completion Network. , 2018, , .		443
6	Cut, Paste and Learn: Surprisingly Easy Synthesis for Instance Detection. , 2017, , .		348
7	An empirical study of context in object detection. , 2009, , .		342
8	Discriminative Random Fields. International Journal of Computer Vision, 2006, 68, 179-201.	10.9	332
9	Geometric reasoning for single image structure recovery. , 2009, , .		297
10	Learning monocular reactive UAV control in cluttered natural environments., 2013,,.		226
11	Contextual classification with functional Max-Margin Markov Networks. , 2009, , .		210
12	Meta-Learning to Detect Rare Objects. , 2019, , .		175
13	From 3D scene geometry to human workspace. , 2011, , .		162
14	Automatic photo pop-up. , 2005, , .		157
15	Trajectons: Action recognition through the motion analysis of tracked features. , 2009, , .		154
16	Recovering Occlusion Boundaries from a Single Image. , 2007, , .		153
17	Blocks World Revisited: Image Understanding Using Qualitative Geometry and Mechanics. Lecture Notes in Computer Science, 2010, , 482-496.	1.0	151
18	Recovering Occlusion Boundaries from an Image. International Journal of Computer Vision, 2011, 91, 328-346.	10.9	139

#	Article	ΙF	Citations
19	Dense Optical Flow Prediction from a Static Image. , 2015, , .		119
20	A complete navigation system for goal acquisition in unknown environments. Autonomous Robots, 1995, 2, 127-145.	3.2	116
21	Measures of Similarity. , 2005, , .		113
22	Moving object detection with laser scanners. Journal of Field Robotics, 2013, 30, 17-43.	3.2	107
23	From Red Wine to Red Tomato: Composition with Context. , 2017, , .		105
24	Data-Driven 3D Primitives for Single Image Understanding. , 2013, , .		103
25	Closing the loop in scene interpretation. , 2008, , .		102
26	3-D scene analysis via sequenced predictions over points and regions. , 2011, , .		91
27	Onboard contextual classification of 3-D point clouds with learned high-order Markov Random Fields. , 2009, , .		85
28	Blending of brain-machine interface and vision-guided autonomous robotics improves neuroprosthetic arm performance during grasping. Journal of NeuroEngineering and Rehabilitation, 2016, 13, 28.	2.4	78
29	Growing a Brain: Fine-Tuning by Increasing Model Capacity. , 2017, , .		76
30	An integrated system for autonomous robotics manipulation. , 2012, , .		73
31	Watch and learn: Semi-supervised learning of object detectors from videos. , 2015, , .		72
32	Learning Compositional Representations for Few-Shot Recognition. , 2019, , .		66
33	Object Recognition by Integrating Multiple Image Segmentations. Lecture Notes in Computer Science, 2008, , 481-494.	1.0	65
34	Autonomy infused teleoperation with application to brain computer interface controlled manipulation. Autonomous Robots, 2017, 41, 1401-1422.	3.2	64
35	Occlusion Boundaries from Motion: Low-Level Detection andÂMid-Level Reasoning. International Journal of Computer Vision, 2009, 82, 325-357.	10.9	62
36	Map-supervised road detection. , 2016, , .		60

#	Article	IF	Citations
37	Techniques for fast and accurate intrasurgical registration. Journal of Image Guided Surgery, $1995, 1, 17-29$ .	0.4	59
38	Learning to Find Object Boundaries Using Motion Cues., 2007,,.		52
39	Making specific features less discriminative to improve point-based 3D object recognition. , 2010, , .		49
40	Introspective perception: Learning to predict failures in vision systems. , 2016, , .		47
41	People helping robots helping people: Crowdsourcing for grasping novel objects. , 2010, , .		45
42	Learning message-passing inference machines for structured prediction. , 2011, , .		45
43	Efficient temporal consistency for streaming video scene analysis. , 2013, , .		42
44	Occlusion reasoning for object detection under arbitrary viewpoint. , 2012, , .		41
45	MAPPER: Multi-Agent Path Planning with Evolutionary Reinforcement Learning in Mixed Dynamic Environments. , 2020, , .		34
46	Potential negative obstacle detection by occlusion labeling., 2007,,.		31
47	Incorporating Background Invariance into Feature-Based Object Recognition. , 2005, , .		26
48	Visual sensing for developing autonomous behavior in snake robots. , 2014, , .		26
49	Seafloor map generation for autonomous underwater vehicle navigation. Autonomous Robots, 1996, 3, 145-168.	3.2	25
50	Structure discovery in multi-modal data: A region-based approach. , 2011, , .		25
51	Detection of parking spots using 2D range data. , 2012, , .		25
52	Towards unsupervised whole-object segmentation: Combining automated matting with boundary detection., 2008,,.		23
53	Geometric reasoning for single image structure recovery. , 2009, , .		23
54	Model recommendation for action recognition. , 2012, , .		20

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55	3DNN: Viewpoint Invariant 3D Geometry Matching for Scene Understanding. , 2013, , .		18
56	3DNN: 3D Nearest Neighbor. International Journal of Computer Vision, 2015, 111, 69-97.	10.9	17
57	HerbDisc: Towards lifelong robotic object discovery. International Journal of Robotics Research, 2015, 34, 3-25.	5.8	16
58	Contextual classification with functional Max-Margin Markov Networks. , 2009, , .		14
59	Scale Selection for the Analysis of Point-Sampled Curves. , 2006, , .		13
60	Techniques for Fast and Accurate Intrasurgical Registration. Computer Aided Surgery, 1995, 1, 17-29.	1.8	12
61	Autonomous Driving with Concurrent Goals and Multiple Vehicles: Mission Planning and Architecture. Autonomous Robots, 2001, 11, 103-115.	3.2	12
62	Single Image 3D without a Single 3D Image. , 2015, , .		12
63	SCALE SELECTION FOR GEOMETRIC FITTING IN NOISY POINT CLOUDS. International Journal of Computational Geometry and Applications, 2010, 20, 543-575.	0.3	11
64	Feature seeding for action recognition. , 2011, , .		11
65	Trinocular Geometry Revisited. International Journal of Computer Vision, 2016, 120, 134-152.	10.9	11
66	Learning safe recovery trajectories with deep neural networks for unmanned aerial vehicles. , 2018, , .		11
67	Opportunistic Use of Vision to Push Back the Path-Planning Horizon. , 2006, , .		10
68	Efficient 3-D scene analysis from streaming data. , 2013, , .		10
69	Multi-armed recommendation bandits for selecting state machine policies for robotic systems. , 2013, ,		10
70	Learning robust failure response for autonomous vision based flight. , 2017, , .		10
71	Learning Orientation Distributions for Object Pose Estimation. , 2020, , .		10
72	Can similar scenes help surface layout estimation?. , 2008, , .		9

#	Article	IF	CITATIONS
73	DISC: A Large-scale Virtual Dataset for Simulating Disaster Scenarios. , 2019, , .		9
74	Title is missing!. Autonomous Robots, 1999, 7, 119-130.	3.2	6
75	Autonomous Driving with Concurrent Goals and Multiple Vehicles: Experiments and Mobility Components. Autonomous Robots, 2002, 12, 135-156.	3.2	5
76	Dealing with small data and training blind spots in the Manhattan world., 2016,,.		5
77	PanoNet3D: Combining Semantic and Geometric Understanding for LiDAR Point Cloud Detection. , 2020, , .		5
78	Direct Fitting of Gaussian Mixture Models. , 2019, , .		3
79	ZePHyR: Zero-shot Pose Hypothesis Rating. , 2021, , .		3
80	Visual chunking: A list prediction framework for region-based object detection., 2015, , .		2
81	Shape-Based Instance Detection Under Arbitrary Viewpoint. , 2013, , 485-495.		2
82	CMSNet: Deep Color and Monochrome Stereo. International Journal of Computer Vision, 2022, 130, 652-668.	10.9	2
83	Coherent Occlusion Reasoning for Instance Recognition. , 2013, , .		1
84	Efficient Model Evaluation with Bilinear Separation Model., 2015,,.		1
85	Multi modal pose fusion for monocular flight with unmanned aerial vehicles. , 2018, , .		1
86	Building 3D models from unregistered multiple range images. Systems and Computers in Japan, 1998, 29, 82-90.	0.2	0
87	Exploiting domain constraints for exemplar based bus detection for traffic scheduling. , 2014, , .		0
88	Physical querying with multi-modal sensing. , 2014, , .		0
89	Mitigating memory requirements for random trees/ferns. , 2015, , .		0
90	Cutting through the clutter: Task-relevant features for image matching. , 2016, , .		0

# ARTICLE IF CITATIONS

91 Finding Organized Structures in 3-D LADAR Data., 2006,,. o