Rafael Medina-Carnicer

List of Publications by Year
in descending order

70 papers	2,259 citations	257450 24 h-index	223800 46 g-index
71 all docs	71 docs citations	71 times ranked	1787 citing authors

#	Article	IF	Citations
1	Speeded up detection of squared fiducial markers. Image and Vision Computing, 2018, 76, 38-47.	4.5	433
2	Generation of fiducial marker dictionaries using Mixed Integer Linear Programming. Pattern Recognition, 2016, 51, 481-491.	8.1	350
3	Mapping and localization from planar markers. Pattern Recognition, 2018, 73, 158-171.	8.1	93
4	A novel method to look for the hysteresis thresholds for the Canny edge detector. Pattern Recognition, 2011, 44, 1201-1211.	8.1	86
5	Polygonal approximation of digital planar curves through break point suppression. Pattern Recognition, 2010, 43, 14-25.	8.1	82
6	UcoSLAM: Simultaneous localization and mapping by fusion of keypoints and squared planar markers. Pattern Recognition, 2020, 101, 107193.	8.1	76
7	Depth silhouettes for gesture recognition. Pattern Recognition Letters, 2008, 29, 319-329.	4.2	64
8	SPM-SLAM: Simultaneous localization and mapping with squared planar markers. Pattern Recognition, 2019, 86, 156-171.	8.1	57
9	On candidates selection for hysteresis thresholds in edge detection. Pattern Recognition, 2009, 42, 1284-1296.	8.1	56
10	Automatic generation of consensus ground truth for the comparison of edge detection techniques. Image and Vision Computing, 2008, 26, 496-511.	4.5	50
11	Dominant point detection: A new proposal. Image and Vision Computing, 2005, 23, 1226-1236.	4.5	48
12	Unimodal thresholding for edge detection. Pattern Recognition, 2008, 41, 2337-2346.	8.1	47
13	Deep multi-task learning for gait-based biometrics. , 2017, , .		46
14	Determining Hysteresis Thresholds for Edge Detection by Combining the Advantages and Disadvantages of Thresholding Methods. IEEE Transactions on Image Processing, 2010, 19, 165-173.	9.8	44
15	Characterization of empirical discrepancy evaluation measures. Pattern Recognition Letters, 2004, 25, 35-47.	4.2	42
16	Robust identification of fiducial markers in challenging conditions. Expert Systems With Applications, 2018, 93, 336-345.	7.6	39
17	Multi-camera people tracking using evidential filters. International Journal of Approximate Reasoning, 2009, 50, 732-749.	3.3	34
18	Design and evaluation of a new three-dimensional motion capture system based on video. Gait and Posture, 2006, 24, 126-129.	1.4	32

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19	Shape from silhouette using Dempster–Shafer theory. Pattern Recognition, 2010, 43, 2119-2131.	8.1	32
20	Assessment of spinal mobility in ankylosing spondylitis using a video-based motion capture system. Manual Therapy, 2012, 17, 422-426.	1.6	30
21	3D human pose estimation from depth maps using a deep combination of poses. Journal of Visual Communication and Image Representation, 2018, 55, 627-639.	2.8	29
22	Multi-camera head pose estimation. Machine Vision and Applications, 2012, 23, 479-490.	2.7	27
23	Adaptive multi-modal stereo people tracking without background modelling. Journal of Visual Communication and Image Representation, 2008, 19, 75-91.	2.8	26
24	A new approach for multi-view gait recognition on unconstrained paths. Journal of Visual Communication and Image Representation, 2016, 38, 396-406.	2.8	26
25	People detection and tracking with multiple stereo cameras using particle filters. Journal of Visual Communication and Image Representation, 2009, 20, 339-350.	2.8	24
26	Pyramidal Fisher Motion for Multiview Gait Recognition. , 2014, , .		23
27	Fractal Markers: A New Approach for Long-Range Marker Pose Estimation Under Occlusion. IEEE Access, 2019, 7, 169908-169919.	4.2	23
28	A new measurement for assessing polygonal approximation of curves. Pattern Recognition, 2011, 44, 45-54.	8.1	20
29	Simultaneous Multi-View Camera Pose Estimation and Object Tracking With Squared Planar Markers. IEEE Access, 2019, 7, 22927-22940.	4.2	20
30	Evaluation of global thresholding techniques in non-contextual edge detection. Pattern Recognition Letters, 2005, 26, 1423-1434.	4.2	19
31	Solving the process of hysteresis without determining the optimal thresholds. Pattern Recognition, 2010, 43, 1224-1232.	8.1	19
32	A novel histogram transformation to improve the performance of thresholding methods in edge detection. Pattern Recognition Letters, 2011, 32, 676-693.	4.2	18
33	Validation of a new objective index to measure spinal mobility: the University of Cordoba Ankylosing Spondylitis Metrology Index (UCOASMI). Rheumatology International, 2014, 34, 401-406.	3.0	18
34	Comparing evolutionary algorithms and particle filters for Markerless Human Motion Capture. Applied Soft Computing Journal, 2014, 17, 153-166.	7.2	18
35	2D versus 3D in the kinematic analysis of the horse at the trot. Veterinary Research Communications, 2009, 33, 507-513.	1.6	15
36	Design, Detection, and Tracking of Customized Fiducial Markers. IEEE Access, 2021, 9, 140066-140078.	4.2	14

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37	Entropy volumes for viewpoint-independent gait recognition. Machine Vision and Applications, 2015, 26, 1079-1094.	2.7	12
38	The computation of polygonal approximations for 2D contours based on a concavity tree. Journal of Visual Communication and Image Representation, 2014, 25, 1905-1917.	2.8	11
39	Keypoint descriptor fusion with Dempsterâ€"Shafer theory. International Journal of Approximate Reasoning, 2015, 60, 57-70.	3.3	11
40	An efficient unsupervised method for obtaining polygonal approximations of closed digital planar curves. Journal of Visual Communication and Image Representation, 2016, 39, 152-163.	2.8	11
41	Viewpoint-independent gait recognition through morphological descriptions of 3D human reconstructions. Image and Vision Computing, 2016, 48-49, 1-13.	4.5	11
42	A new thresholding approach for automatic generation of polygonal approximations. Journal of Visual Communication and Image Representation, 2016, 35, 155-168.	2.8	11
43	3D Reconstruction and alignment by consumer RGB-D sensors and fiducial planar markers for patient positioning in radiation therapy. Computer Methods and Programs in Biomedicine, 2019, 180, 105004.	4.7	10
44	Tracking fiducial markers with discriminative correlation filters. Image and Vision Computing, 2021, 107, 104094.	4.5	10
45	Unsupervised generation of polygonal approximations based on the convex hull. Pattern Recognition Letters, 2020, 135, 138-145.	4.2	9
46	Stereo Pictorial Structure for 2D articulated human pose estimation. Machine Vision and Applications, 2016, 27, 157-174.	2.7	7
47	Particle filtering with multiple and heterogeneous cameras. Pattern Recognition, 2010, 43, 2390-2405.	8.1	6
48	An octree-based method for shape from inconsistent silhouettes. Pattern Recognition, 2012, 45, 3245-3255.	8.1	6
49	Flexible body scanning without template models. Signal Processing, 2019, 154, 350-362.	3.7	6
50	Joint scene and object tracking for cost-Effective augmented reality guided patient positioning in radiation therapy. Computer Methods and Programs in Biomedicine, 2021, 209, 106296.	4.7	6
51	GUD-Canny: a real-time GPU-based unsupervised and distributed Canny edge detector. Journal of Real-Time Image Processing, 2022, 19, 591-605.	3.5	6
52	On stop conditions about methods to obtain polygonal approximations relied on break point suppression. Image and Vision Computing, 2012, 30, 513-523.	4.5	5
53	Mixing bodyâ€parts model for 2D human pose estimation in stereo videos. IET Computer Vision, 2017, 11, 426-433.	2.0	5
54	Detection of Binary Square Fiducial Markers Using an Event Camera. IEEE Access, 2021, 9, 27813-27826.	4.2	5

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55	Three-dimensional action recognition using volume integrals. Pattern Analysis and Applications, 2012, 15, 289-298.	4.6	4
56	Three hypothesis algorithm with occlusion reasoning for multiple people tracking. Journal of Electronic Imaging, 2015, 24, 013015.	0.9	4
57	Parallelization strategies for markerless human motion capture. Journal of Real-Time Image Processing, 2018, 14, 453-467.	3.5	4
58	Fast detection of marker pixels in video-based motion capture systems. Pattern Recognition Letters, 2009, 30, 432-439.	4.2	3
59	Example-based procedural modelling by geometric constraint solving. Multimedia Tools and Applications, 2012, 60, 1-30.	3.9	3
60	Multi-view gait recognition on curved trajectories. , 2015, , .		3
61	Contour simplification using a multi-scale local phase analysis. Image and Vision Computing, 2008, 26, 1499-1506.	4.5	2
62	Classification of Fiducial Markers in Challenging Conditions with SVM. Lecture Notes in Computer Science, 2017, , 344-352.	1.3	2
63	A Method for Dominant Points Detection and Matching 2D Object Identification. Lecture Notes in Computer Science, 2004, , 424-431.	1.3	1
64	Shape from pairwise silhouettes for plan-view map generation. Image and Vision Computing, 2012, 30, 122-133.	4.5	1
65	Conflict-based pruning of a solution space within a constructive geometric constraint solver. Applied Intelligence, 2014, 41, 897-922.	5.3	1
66	Method for Polygonal Approximation through Dominant Points Deletion. Lecture Notes in Computer Science, 2010, , 350-358.	1.3	1
67	Dominant Points Detection Using Phase Congruence. Lecture Notes in Computer Science, 2007, , 138-145.	1.3	1
68	CAVLCU: an efficient GPU-based implementation of CAVLC. Journal of Supercomputing, 2022, 78, 7556-7590.	3.6	1
69	Occlusion Model from Human Interaction Analysis for Tracking Multiple People. , 2013, , .		0
70	Unsupervised Approximation of Digital Planar Curves. Lecture Notes in Computer Science, 2015, , 200-207.	1.3	0