Juan Andrade-Cetto

List of Publications by Year
in descending order

91 papers	2,136 citations	361413 20 h-index	315739 38 g-index
95 all docs	95 docs citations	95 times ranked	1707 citing authors

#	Article	IF	Citations
1	WOLF: A Modular Estimation Framework for Robotics Based on Factor Graphs. IEEE Robotics and Automation Letters, 2022, 7, 4710-4717.	5.1	6
2	Event-Based Line SLAM in Real-Time. IEEE Robotics and Automation Letters, 2022, 7, 8146-8153.	5.1	10
3	Dual-Branch CNNs for Vehicle Detection and Tracking on LiDAR Data. IEEE Transactions on Intelligent Transportation Systems, 2021, 22, 6942-6953.	8.0	16
4	Multi-task closed-loop inverse kinematics stability through semidefinite programming. , 2020, , .		1
5	Visual Servo. Springer Tracts in Advanced Robotics, 2019, , 57-77.	0.4	1
6	Pose-graph SLAM sparsification using factor descent. Robotics and Autonomous Systems, 2019, 119, 108-118.	5.1	11
7	Visual Servoing of Aerial Manipulators. Springer Tracts in Advanced Robotics, 2019, , 191-202.	0.4	1
8	Joint on-manifold self-calibration of odometry model and sensor extrinsics using pre-integration. , 2019, , .		7
9	Active SLAM for Autonomous Underwater Exploration. Remote Sensing, 2019, 11, 2827.	4.0	26
10	Task Control. Springer Tracts in Advanced Robotics, 2019, , 79-133.	0.4	0
11	Robot State Estimation. Springer Tracts in Advanced Robotics, 2019, , 5-55.	0.4	0
12	Boosted Random Ferns for Object Detection. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2018, 40, 272-288.	13.9	10
13	Mapping, Planning and Exploration with Pose SLAM. Springer Tracts in Advanced Robotics, 2018, , .	0.4	20
14	Autonomous navigation of micro aerial vehicles using high-rate and low-cost sensors. Autonomous Robots, 2018, 42, 1263-1280.	4.8	36
15	Graph SLAM Sparsification With Populated Topologies Using Factor Descent Optimization. IEEE Robotics and Automation Letters, 2018, 3, 1322-1329.	5.1	21
16	The AEROARMS Project: Aerial Robots with Advanced Manipulation Capabilities for Inspection and Maintenance. IEEE Robotics and Automation Magazine, 2018, 25, 12-23.	2.0	157
17	Path Planning in Belief Space with Pose SLAM. Springer Tracts in Advanced Robotics, 2018, , 53-87.	0.4	7
18	Active Pose SLAM. Springer Tracts in Advanced Robotics, 2018, , 89-108.	0.4	16

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19	Low Resolution Lidar-Based Multi-Object Tracking for Driving Applications. Advances in Intelligent Systems and Computing, 2018, , 287-298.	0.6	6
20	SLAM Front-End. Springer Tracts in Advanced Robotics, 2018, , 7-24.	0.4	0
21	SLAM Back-End. Springer Tracts in Advanced Robotics, 2018, , 25-52.	0.4	0
22	Word Ordering and Document Adjacency for Large Loop Closure Detection in 2-D Laser Maps. IEEE Robotics and Automation Letters, 2017, 2, 1532-1539.	5.1	12
23	Uncalibrated Visual Servo for Unmanned Aerial Manipulation. IEEE/ASME Transactions on Mechatronics, 2017, 22, 1610-1621.	5.8	60
24	Trajectory Generation for Unmanned Aerial Manipulators Through Quadratic Programming. IEEE Robotics and Automation Letters, 2017, 2, 389-396.	5.1	25
25	Nonlinear model predictive control for aerial manipulation. , 2017, , .		27
26	Deconvolutional networks for point-cloud vehicle detection and tracking in driving scenarios. , 2017, , .		24
27	Factor descent optimization for sparsification in graph SLAM. , 2017, , .		2
28	MSClique: Multiple Structure Discovery through the Maximum Weighted Clique Problem. PLoS ONE, 2016, 11, e0145846.	2.5	2
29	Observability analysis and optimal sensor placement in stereo radar odometry. , 2016, , .		5
30	Hybrid Visual Servoing With Hierarchical Task Composition for Aerial Manipulation. IEEE Robotics and Automation Letters, 2016, 1, 259-266.	5.1	108
31	High-frequency MAV state estimation using low-cost inertial and optical flow measurement units. , 2015, , .		22
32	Active pose SLAM with RRT*. , 2015, , .		28
33	Uncertainty analysis of the DLT-Lines calibration algorithm for cameras with radial distortion. Computer Vision and Image Understanding, 2015, 140, 115-126.	4.7	8
34	Potential information fields for mobile robot exploration. Robotics and Autonomous Systems, 2015, 69, 68-79.	5.1	39
35	ECMRâ€™13 Special Issue. Robotics and Autonomous Systems, 2015, 69, 1-2.	5.1	1
36	Terrain Classification in Complex Threeâ€dimensional Outdoor Environments. Journal of Field Robotics, 2015, 32, 42-60.	6.0	37

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37	LETHA: Learning from High Quality Inputs for 3D Pose Estimation in Low Quality Images. , 2014, , .		2
38	Task priority control for aerial manipulation. , 2014, , .		18
39	Calibration of an Outdoor Distributed Camera Network with a 3D Point Cloud. Sensors, 2014, 14, 13708-13729.	3.8	5
40	Dense entropy decrease estimation for mobile robot exploration. , 2014, , .		11
41	Localization in highly dynamic environments using dual-timescale NDT-MCL. , 2014, , .		40
42	Exploration on continuous Gaussian process frontier maps. , 2014, , .		39
43	Exhaustive Linearization for Robust Camera Pose and Focal Length Estimation. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2013, 35, 2387-2400.	13.9	108
44	Uncalibrated image-based visual servoing. , 2013, , .		20
45	Planning Reliable Paths With Pose SLAM. IEEE Transactions on Robotics, 2013, 29, 1050-1059.	10.3	61
46	Estimation of camera calibration uncertainty using LIDAR data. , 2013, , .		1
47	HRA&#x2217;: Hybrid randomized path planning for complex 3D environments. , 2013, , .		5
48	Mobile robot exploration with potential information fields. , 2013, , .		11
49	Simultaneous Pose, Focal Length and 2D-to-3D Correspondences from Noisy Observations. , 2013, , .		1
50	Active Pose SLAM. , 2012, , .		59
51	Bootstrapping Boosted Random Ferns for discriminative and efficient object classification. Pattern Recognition, 2012, 45, 3141-3153.	8.1	38
52	Path planning in belief space with pose SLAM. , 2011, , .		32
53	Amortized constant time state estimation in Pose SLAM and hierarchical SLAM using a mixed Kalman-information filter. Robotics and Autonomous Systems, 2011, 59, 310-318.	5.1	6
54	Efficient 3D Object Detection using Multiple Pose-Specific Classifiers. , 2011, , .		15

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55	Detection Performance Evaluation of Boosted Random Ferns. Lecture Notes in Computer Science, 2011, , 67-75.	1.3	1
56	Object modeling using a ToF camera under an uncertainty reduction approach. , 2010, , .		26
57	Decentralized Sensor Fusion for Ubiquitous Networking Robotics in Urban Areas. Sensors, 2010, 10, 2274-2314.	3.8	37
58	Action Selection for Single-Camera SLAM. IEEE Transactions on Systems, Man, and Cybernetics, 2010, 40, 1567-1581.	5.0	30
59	Information-Based Compact Pose SLAM. IEEE Transactions on Robotics, 2010, 26, 78-93.	10.3	146
60	Efficient rotation invariant object detection using boosted Random Ferns. , 2010, , .		42
61	Shared Random Ferns for Efficient Detection of Multiple Categories. , 2010, , .		12
62	Combining color-based invariant gradient detector with HoG descriptors for robust image detection in scenes under cast shadows. , 2009, , .		15
63	3D mapping for urban service robots. , 2009, , .		20
64	Reduced state representation in delayed-state SLAM. , 2009, , .		1
65	Calibrating an outdoor distributed camera network using Laser Range Finder data. , 2009, , .		4
66	Local Boosted Features for Pedestrian Detection. Lecture Notes in Computer Science, 2009, , 128-135.	1.3	1
67	Recovering epipolar direction from two affine views of a planar object. Computer Vision and Image Understanding, 2008, 112, 195-209.	4.7	2
68	A Wire-Based Active Tracker. , 2008, 24, 642-651.		9
69	Vision-based loop closing for delayed state robot mapping. , 2007, , .		17
70	On the Observability of Bearing-only SLAM. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	33
71	GUIDING AND LOCALISING IN REAL-TIME A MOBILE ROBOT WITH A MONOCULAR CAMERA IN NON-FLAT TERRAINS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 560-565.	0.4	1
72	Unidimensional Multiscale Local Features for Object Detection Under Rotation and Mild Occlusions. Lecture Notes in Computer Science, 2007, , 645-651.	1.3	0

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73	Robust Color Contour Object Detection Invariant to Shadows. , 2007, , 301-310.		1
74	Computation of Rotation Local Invariant Features using the Integral Image for Real Time Object Detection. , 2006, , .		14
75	Computing the rate of spread of linear flame fronts by thermal image processing. Fire Safety Journal, 2006, 41, 569-579.	3.1	69
76	Orientation Invariant Features for Multiclass Object Recognition. Lecture Notes in Computer Science, 2006, , 655-664.	1.3	5
77	Affine Epipolar Direction from Two Views of a Planar Contour. Lecture Notes in Computer Science, 2006, , 944-955.	1.3	3
78	The effects of partial observability when building fully correlated maps. , 2005, 21, 771-777.		33
79	The effects of partial observability in SLAM. , 2004, , .		30
80	Fusion of Color and Shape for Object Tracking under Varying Illumination. Lecture Notes in Computer Science, 2003, , 580-588.	1.3	10
81	CONCURRENT MAP BUILDING AND LOCALIZATION ON INDOOR DYNAMIC ENVIRONMENTS. International Journal of Pattern Recognition and Artificial Intelligence, 2002, 16, 361-374.	1.2	40
82	Graph-based representations and techniques for image processing and image analysis. Pattern Recognition, 2002, 35, 639-650.	8.1	76
83	Modeling and Control of Excavator Dynamics during Digging Operation. Journal of Aerospace Engineering, 1996, 9, 10-18.	1.4	122
84	Concurrent map building and localization with landmark validation. , 0, , .		3
85	Learning of dynamic environments by a mobile robot from stereo cues. , 0, , .		7
86	Localization of human faces fusing color segmentation and depth from stereo. , 0, , .		9
87	3D real-time head tracking fusing color histograms and stereovision. , 0, , .		14
88	Temporal landmark validation in CML. , 0, , .		2
89	Conditions for suboptimal filter stability in SLAM. , 0, , .		12
90	Unscented Transformation of Vehicle States in SLAM. , 0, , .		26

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91	Active control for single camera SLAM. , 0, , .		34