

Miguel Cazorla

List of Publications by Year in descending order

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Version: 2024-02-01

135
papers

1,608
citations

393982

19
h-index

433756

31
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138
all docs

138
docs citations

138
times ranked

1721
citing authors

#	ARTICLE	IF	CITATIONS
1	3DSliceLeNet: Recognizing 3D Objects Using a Slice-Representation. IEEE Access, 2022, 10, 15378-15392.	2.6	0
2	Automatic Understanding and Mapping of Regions in Cities Using Google Street View Images. Applied Sciences (Switzerland), 2022, 12, 2971.	1.3	4
3	UrOAC: Urban objects in any-light conditions. Data in Brief, 2022, 42, 108172.	0.5	0
4	A Hand Motor Skills Rehabilitation for the Injured Implemented on a Social Robot. Applied Sciences (Switzerland), 2021, 11, 2943.	1.3	3
5	Accurate Multilevel Classification for Wildlife Images. Computational Intelligence and Neuroscience, 2021, 2021, 1-11.	1.1	3
6	Studying the Transferability of Non-Targeted Adversarial Attacks. , 2021, , .		0
7	Monocular 3D Hand Pose Estimation for Teleoperating Low-Cost Actuators. Advances in Intelligent Systems and Computing, 2021, , 345-359.	0.5	0
8	NVS-MonoDepth: Improving Monocular Depth Prediction with Novel View Synthesis. , 2021, , .		4
9	COMBAHO: A deep learning system for integrating brain injury patients in society. Pattern Recognition Letters, 2020, 137, 80-90.	2.6	2
10	Enhancing perception for the visually impaired with deep learning techniques and low-cost wearable sensors. Pattern Recognition Letters, 2020, 137, 27-36.	2.6	44
11	How to add new knowledge to already trained deep learning models applied to semantic localization. Applied Intelligence, 2020, 50, 14-28.	3.3	1
12	Biomarker Localization From Deep Learning Regression Networks. IEEE Transactions on Medical Imaging, 2020, 39, 2121-2132.	5.4	16
13	EVA: EVALuating at-home rehabilitation exercises using augmented reality and low-cost sensors. Virtual Reality, 2020, 24, 567-581.	4.1	15
14	NurbsNet: A Nurbs approach for 3d object recognition. , 2020, , .		1
15	An sEMG-Controlled 3D Game for Rehabilitation Therapies: Real-Time Time Hand Gesture Recognition Using Deep Learning Techniques. Sensors, 2020, 20, 6451.	2.1	46
16	Par3DNet: Using 3DCNNs for Object Recognition on Tridimensional Partial Views. Applied Sciences (Switzerland), 2020, 10, 3409.	1.3	9
17	A Voxelized Fractal Descriptor for 3D Object Recognition. IEEE Access, 2020, 8, 161958-161968.	2.6	9
18	Using a 3D CNN for Rejecting False Positives on Pedestrian Detection. , 2020, , .		5

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19	Semantic visual recognition in a cognitive architecture for social robots. Integrated Computer-Aided Engineering, 2020, 27, 301-316.	2.5	7
20	Machine Learning Techniques for Assistive Robotics. Electronics (Switzerland), 2020, 9, 821.	1.8	2
21	Socially Assistive Robots for Older Adults and People with Autism: An Overview. Electronics (Switzerland), 2020, 9, 367.	1.8	55
22	Computer Aided Detection of Pulmonary Embolism Using Multi-Slice Multi-Axial Segmentation. Applied Sciences (Switzerland), 2020, 10, 2945.	1.3	17
23	A Story-Telling Social Robot with Emotion Recognition Capabilities for the Intellectually Challenged. Advances in Intelligent Systems and Computing, 2020, , 599-609.	0.5	2
24	Map Slammer: Densifying Scattered KSLAM 3D Maps with Estimated Depth. Advances in Intelligent Systems and Computing, 2020, , 563-574.	0.5	0
25	Automatic semantic maps generation from lexical annotations. Autonomous Robots, 2019, 43, 697-712.	3.2	10
26	Rehabilitation Technology: Assistance from Hospital to Home. Computational Intelligence and Neuroscience, 2019, 2019, 1-8.	1.1	17
27	Artificial Semantic Memory with Autonomous Learning Applied to Social Robots. Lecture Notes in Computer Science, 2019, , 401-411.	1.0	1
28	PHAROS 2.0â€”A PHysical Assistant Robot System Improved. Sensors, 2019, 19, 4531.	2.1	23
29	UASOL, a large-scale high-resolution outdoor stereo dataset. Scientific Data, 2019, 6, 162.	2.4	10
30	Inferring Static Hand Poses from a Low-Cost Non-Intrusive sEMG Sensor. Sensors, 2019, 19, 371.	2.1	37
31	Enhancing the Ambient Assisted Living Capabilities with a Mobile Robot. Computational Intelligence and Neuroscience, 2019, 2019, 1-15.	1.1	15
32	Using Inferred Gestures from sEMG Signal to Teleoperate a Domestic Robot for the Disabled. Lecture Notes in Computer Science, 2019, , 198-207.	1.0	2
33	Accurate and efficient 3D hand pose regression for robot hand teleoperation using a monocular RGB camera. Expert Systems With Applications, 2019, 136, 327-337.	4.4	32
34	A Socially Assistive Robot for Elderly Exercise Promotion. IEEE Access, 2019, 7, 75515-75529.	2.6	20
35	Multilevel Classification using a Taxonomy Applied to Recognizing Diptera Images. , 2019, , .		0
36	Refining the Fusion of Pepper Robot and Estimated Depth Maps Method for Improved 3D Perception. IEEE Access, 2019, 7, 185076-185085.	2.6	5

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37	Semantic Localization of a Robot in a Real Home. <i>Advances in Intelligent Systems and Computing</i> , 2019, , 3-15.	0.5	2
38	Large-scale multiview 3D hand pose dataset. <i>Image and Vision Computing</i> , 2019, 81, 25-33.	2.7	39
39	An augmented reality application for improving shopping experience in large retail stores. <i>Virtual Reality</i> , 2019, 23, 281-291.	4.1	51
40	Improving the 3D Perception of the Pepper Robot Using Depth Prediction from Monocular Frames. <i>Advances in Intelligent Systems and Computing</i> , 2019, , 132-146.	0.5	4
41	Semi-supervised 3D object recognition through CNN labeling. <i>Applied Soft Computing Journal</i> , 2018, 65, 603-613.	4.1	28
42	Compression and registration of 3D point clouds using GMMs. <i>Pattern Recognition Letters</i> , 2018, 110, 8-15.	2.6	13
43	Interactive 3D object recognition pipeline on mobile GPGPU computing platforms using low-cost RGB-D sensors. <i>Journal of Real-Time Image Processing</i> , 2018, 14, 585-604.	2.2	11
44	Bioinspired point cloud representation: 3D object tracking. <i>Neural Computing and Applications</i> , 2018, 29, 663-672.	3.2	5
45	Robust Hand Pose Regression Using Convolutional Neural Networks. <i>Advances in Intelligent Systems and Computing</i> , 2018, , 591-602.	0.5	2
46	A New Dataset and Performance Evaluation of a Region-Based CNN for Urban Object Detection. <i>Electronics (Switzerland)</i> , 2018, 7, 301.	1.8	18
47	Geoffrey: An Automated Schedule System on a Social Robot for the Intellectually Challenged. <i>Computational Intelligence and Neuroscience</i> , 2018, 2018, 1-17.	1.1	8
48	Finding the Place: How to Train and Use Convolutional Neural Networks for a Dynamically Learning Robot. , 2018, , .		1
49	A New Dataset and Performance Evaluation of a Region-based CNN for Urban Object Detection. , 2018, , .		4
50	Automated Agatston score computation in non-ECG gated CT scans using deep learning. , 2018, 10574, .		37
51	PHAROSâ€™PHysical Assistant RObot System. <i>Sensors</i> , 2018, 18, 2633.	2.1	49
52	3D Object Mapping Using a Labelling System. <i>Advances in Intelligent Systems and Computing</i> , 2018, , 579-590.	0.5	1
53	A Survey of 3D Rigid Registration Methods for RGB-D Cameras. <i>Advances in Computer and Electrical Engineering Book Series</i> , 2018, , 74-98.	0.2	2
54	Robot Semantic Localization Through CNN Descriptors. <i>Advances in Intelligent Systems and Computing</i> , 2018, , 567-578.	0.5	1

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55	Automatic Learning Improves Human-Robot Interaction in Productive Environments. , 2018, , 2014-2024.		0
56	On the Relevance of the Loss Function in the Agatston Score Regression from Non-ECG Gated CT Scans. Lecture Notes in Computer Science, 2018, 11040, 326-334.	1.0	4
57	Editorial: special issue on computational intelligence for vision and robotics. Neural Computing and Applications, 2017, 28, 853-854.	3.2	0
58	Object recognition in noisy RGB-D data using GNG. Pattern Analysis and Applications, 2017, 20, 1061-1076.	3.1	5
59	Multi-sensor 3D object dataset for object recognition with full pose estimation. Neural Computing and Applications, 2017, 28, 941-952.	3.2	9
60	LexToMap: lexical-based topological mapping. Advanced Robotics, 2017, 31, 268-281.	1.1	8
61	A robotic platform for customized and interactive rehabilitation of persons with disabilities. Pattern Recognition Letters, 2017, 99, 105-113.	2.6	17
62	LonchaNet: A sliced-based CNN architecture for real-time 3D object recognition. , 2017, , .		39
63	Pedestrian Movement Direction Recognition Using Convolutional Neural Networks. IEEE Transactions on Intelligent Transportation Systems, 2017, 18, 3540-3548.	4.7	53
64	A study of the effect of noise and occlusion on the accuracy of convolutional neural networks applied to 3D object recognition. Computer Vision and Image Understanding, 2017, 164, 124-134.	3.0	13
65	A recurrent neural network based Schaeffer gesture recognition system. , 2017, , .		5
66	Machine Learning Improves Human-Robot Interaction in Productive Environments: A Review. Lecture Notes in Computer Science, 2017, , 283-293.	1.0	4
67	3D object detection with deep learning. Journal of Physical Agents, 2017, 8, .	0.3	3
68	Recognizing Pedestrian Direction Using Convolutional Neural Networks. Lecture Notes in Computer Science, 2017, , 235-245.	1.0	5
69	Automatic Learning Improves Human-Robot Interaction in Productive Environments. International Journal of Computer Vision and Image Processing, 2017, 7, 65-75.	0.3	1
70	Scene classification based on semantic labeling. Advanced Robotics, 2016, 30, 758-769.	1.1	16
71	Automatic Schaeffer's gestures recognition system. Expert Systems, 2016, 33, 480-488.	2.9	10
72	Group activity description and recognition based on trajectory analysis and neural networks. , 2016, , .		13

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73	PointNet: A 3D Convolutional Neural Network for real-time object class recognition. , 2016, , .		109
74	Color smoothing for RGB-D data using entropy information. Applied Soft Computing Journal, 2016, 46, 361-380.	4.1	39
75	Editorial: Neural Processing Letters Special Issue on "Neural Networks for Vision and Robotics" Neural Processing Letters, 2016, 43, 309-310.	2.0	0
76	Semantic localization in the PCL library. Robotics and Autonomous Systems, 2016, 75, 641-648.	3.0	19
77	3DCOMET: 3D compression methods test dataset. Robotics and Autonomous Systems, 2016, 75, 550-557.	3.0	5
78	Object Categorization from RGB-D Local Features and Bag of Words. Advances in Intelligent Systems and Computing, 2016, , 635-644.	0.5	2
79	3D Surface Reconstruction of Noisy Point Clouds Using Growing Neural Gas: 3D Object/Scene Reconstruction. Neural Processing Letters, 2016, 43, 401-423.	2.0	19
80	Computing Image Descriptors from Annotations Acquired from External Tools. Advances in Intelligent Systems and Computing, 2016, , 673-683.	0.5	3
81	JavaVis: An integrated computer vision library for teaching computer vision. Computer Applications in Engineering Education, 2015, 23, 258-267.	2.2	4
82	Experiences using an open source software library to teach computer vision subjects. Journal of Technology and Science Education, 2015, 5, .	0.5	0
83	Using GNG on 3D Object Recognition in Noisy RGB-D data. , 2015, , .		2
84	ViDRILO: The Visual and Depth Robot Indoor Localization with Objects information dataset. International Journal of Robotics Research, 2015, 34, 1681-1687.	5.8	25
85	Processing point cloud sequences with Growing Neural Gas. , 2015, , .		5
86	Where Are We After Five Editions?: Robot Vision Challenge, a Competition that Evaluates Solutions for the Visual Place Classification Problem. IEEE Robotics and Automation Magazine, 2015, 22, 147-156.	2.2	10
87	Non-rigid point set registration using color and data downsampling. , 2015, , .		5
88	3D model reconstruction using neural gas accelerated on GPU. Applied Soft Computing Journal, 2015, 32, 87-100.	4.1	5
89	Object Recognition in Noisy RGB-D Data. Lecture Notes in Computer Science, 2015, , 261-270.	1.0	2
90	SARASOM: a supervised architecture based on the recurrent associative SOM. Neural Computing and Applications, 2015, 26, 1103-1115.	3.2	2

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91	Real-time 3D semi-local surface patch extraction using GPGPU. Journal of Real-Time Image Processing, 2015, 10, 647-666.	2.2	6
92	Optimized Representation of 3D Sequences Using Neural Networks. Lecture Notes in Computer Science, 2015, , 251-260.	1.0	0
93	A Comparative Study of Downsampling Techniques for Non-rigid Point Set Registration Using Color. Lecture Notes in Computer Science, 2015, , 281-290.	1.0	2
94	Parallel Computational Intelligence-Based Multi-Camera Surveillance System. Journal of Sensor and Actuator Networks, 2014, 3, 95-112.	2.3	6
95	A Comparative Study of Registration Methods for RGB-D Video of Static Scenes. Sensors, 2014, 14, 8547-8576.	2.1	32
96	3D Maps Representation Using GNG. Mathematical Problems in Engineering, 2014, 2014, 1-11.	0.6	2
97	Geometric 3D point cloud compression. Pattern Recognition Letters, 2014, 50, 55-62.	2.6	58
98	3D maps representation using GNG. , 2014, , .		4
99	A robust and fast method for 6DoF motion estimation from generalized 3D data. Autonomous Robots, 2014, 36, 295-308.	3.2	14
100	3D colour object reconstruction based on Growing Neural Gas. , 2014, , .		8
101	An improvement of a SLAM RGB-D method with movement prediction derived from a study of visual features. Advanced Robotics, 2014, 28, 1231-1242.	1.1	1
102	ImageCLEF 2014: Overview and Analysis of the Results. Lecture Notes in Computer Science, 2014, , 192-211.	1.0	44
103	Combining visual features and Growing Neural Gas networks for robotic 3D SLAM. Information Sciences, 2014, 276, 174-185.	4.0	18
104	Point cloud data filtering and downsampling using growing neural gas. , 2013, , .		27
105	ImageCLEF 2013: The Vision, the Data and the Open Challenges. Lecture Notes in Computer Science, 2013, , 250-268.	1.0	18
106	Improving 3D Keypoint Detection from Noisy Data Using Growing Neural Gas. Lecture Notes in Computer Science, 2013, , 480-487.	1.0	5
107	Portable 3D laser-camera calibration system with color fusion for SLAM. International Journal of Automation and Smart Technology, 2013, 3, 29-35.	0.4	2
108	A Review of Registration Methods on Mobile Robots. , 2013, , 140-153.		0

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109	Computer Vision Applications of Self-Organizing Neural Networks. , 2013, , 129-138.		0
110	R and D Cloud CEIB: Management and Knowledge Extraction System for Bioimaging in the Cloud. , 2012, , .		1
111	A study of a soft computing based method for 3D scenario reconstruction. Applied Soft Computing Journal, 2012, 12, 3158-3164.	4.1	5
112	Using GNG to improve 3D feature extractionâ€”Application to 6DoF egomotion. Neural Networks, 2012, 32, 138-146.	3.3	17
113	GPGPU implementation of growing neural gas: Application to 3D scene reconstruction. Journal of Parallel and Distributed Computing, 2012, 72, 1361-1372.	2.7	9
114	Topological visual mapping in robotics. Cognitive Processing, 2012, 13, 305-308.	0.7	7
115	Portable autonomous walk calibration for 4-legged robots. Applied Intelligence, 2012, 36, 136-147.	3.3	1
116	R & D Cloud CEIB: Management System and Knowledge Extraction for Bioimaging in the Cloud. Advances in Intelligent and Soft Computing, 2012, , 331-338.	0.2	1
117	Using 3D GNG-based reconstruction for 6DoF egomotion. , 2011, , .		2
118	Predictions tasks with words and sequences: Comparing a novel recurrent architecture with the Elman network. , 2011, , .		0
119	Topological SLAM Using Omnidirectional Images: Merging Feature Detectors and Graph-Matching. Lecture Notes in Computer Science, 2010, , 464-475.	1.0	10
120	Testing Image Segmentation for Topological SLAM with Omnidirectional Images. Lecture Notes in Computer Science, 2010, , 266-277.	1.0	0
121	Large scale environment partitioning in mobile robotics recognition tasks. Journal of Physical Agents, 2010, 4, 11-18.	0.3	2
122	Region and constellations based categorization of images with unsupervised graph learning. Image and Vision Computing, 2009, 27, 960-978.	2.7	5
123	Feature selection, mutual information, and the classification of high-dimensional patterns. Pattern Analysis and Applications, 2008, 11, 309-319.	3.1	60
124	Contextual visual localization: cascaded submap classification, optimized saliency detection, and fast view matching. , 2007, , .		6
125	3D plane-based egomotion for SLAM on semi-structured environment. , 2007, , .		17
126	Team Chaos 2006. , 2006, , .		1

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127	Walk Calibration in a Four-legged Robot. , 2006, , 493-500.		1
128	Active stereo based compact mapping. , 2005, , .		3
129	Two bayesian methods for junction classification. IEEE Transactions on Image Processing, 2003, 12, 317-327.	6.0	37
130	Junction detection and grouping with probabilistic edge models and Bayesian. Pattern Recognition, 2002, 35, 1869-1881.	5.1	13
131	Bayesian Models for Finding and Grouping Junctions. Lecture Notes in Computer Science, 1999, , 70-82.	1.0	3
132	A combined probabilistic framework for learning gestures and actions. Lecture Notes in Computer Science, 1998, , 658-667.	1.0	0
133	Deformable templates for tracking and analysis of intravascular ultrasound sequences. Lecture Notes in Computer Science, 1997, , 521-534.	1.0	5
134	Feature Extraction and Grouping for Robot Vision Tasks. , 0, , .		1
135	A Review of Registration Methods on Mobile Robots. , 0, , 562-574.		0