Antonios Gasteratos

List of Publications by Year
in descending order

169	3,781	172457	168389
papers	citations	29	53
		h-index	g-index

177	177	177	2763
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Do Neural Network Weights Account for Classes Centers?. IEEE Transactions on Neural Networks and Learning Systems, 2023, 34, 8815-8824.	11.3	10
2	Generating Graph-Inspired Descriptors by Merging Ground-Level and Satellite Data for Robot Localization. Cybernetics and Systems, 2023, 54, 697-715.	2.5	6
3	An Active Learning Paradigm for Online Audio-Visual Emotion Recognition. IEEE Transactions on Affective Computing, 2022, 13, 756-768.	8.3	62
4	Deep Feature Space: A Geometrical Perspective. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2022, 44, 6823-6838.	13.9	37
5	Fast and incremental loop closure detection with deep features and proximity graphs. Journal of Field Robotics, 2022, 39, 473-493.	6.0	26
6	Visual Loop-Closure Detection via Prominent Feature Tracking. Journal of Intelligent and Robotic Systems: Theory and Applications, 2022, 104, 1.	3.4	9
7	Self-localization based on terrestrial and satellite semantics. Engineering Applications of Artificial Intelligence, 2022, 111, 104824.	8.1	9
8	Continuous Emotion Recognition for Long-Term Behavior Modeling through Recurrent Neural Networks. Technologies, 2022, 10, 59.	5.1	24
9	The Revisiting Problem in Simultaneous Localization and Mapping: A Survey on Visual Loop Closure Detection. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 19929-19953.	8.0	46
10	Attention! A Lightweight 2D Hand Pose Estimation Approach. IEEE Sensors Journal, 2021, 21, 11488-11496.	4.7	43
11	CNN€based novelty detection for terrestrial and extra€terrestrial autonomous exploration. IET Cyber-Systems and Robotics, 2021, 3, 116-127.	1.8	5
12	A novel moving-base RTK-GPS-Based wearable apparatus for precise localization of humans in peril. Microprocessors and Microsystems, 2021, 82, 103833.	2.8	2
13	Tracking€DOSeqSLAM: A dynamic sequence€based visual place recognition paradigm. IET Computer Vision, 2021, 15, 258-273.	2.0	21
14	Sequence-based visual place recognition: a scale-space approach for boundary detection. Autonomous Robots, 2021, 45, 505.	4.8	1
15	A Product Pose Tracking Paradigm Based on Deep Points Detection. Machines, 2021, 9, 112.	2.2	2
16	Enhancing satellite semantic maps with ground-level imagery. Robotics and Autonomous Systems, 2021, 139, 103760.	5.1	23
17	Learning Long-Term Behavior through Continuous Emotion Estimation. , 2021, , .		2
18	Modest-vocabulary loop-closure detection with incremental bag of tracked words. Robotics and Autonomous Systems, 2021, 141, 103782.	5.1	42

#	Article	IF	Citations
19	The Role of Machine Vision in Industry 4.0: an automotive manufacturing perspective. , 2021, , .		20
20	The role of machine vision in industry 4.0: A textile manufacturing perspective. , 2021, , .		6
21	Sequence-based mapping for probabilistic visual loop-closure detection. , 2021, , .		14
22	Safe UAV landing: A low-complexity pipeline for surface conditions recognition. , 2021, , .		12
23	Web acquired image datasets need curation: an examplar pipeline evaluated on Greek food images. , 2021, , .		1
24	Autonomous Vehicle Navigation in Semi-structured Environments Based on Sparse Waypoints and LiDAR Road-tracking. , 2021, , .		10
25	A new method to combine detection and tracking algorithms for fast and accurate human localization in UAV-based SAR operations. , 2020, , .		3
26	A Sociotechnical Approach to UAV Safety for Search and Rescue Missions. , 2020, , .		3
27	Multi-layer map: Augmenting semantic visual memory. , 2020, , .		20
28	MARMA: A Mobile Augmented Reality Maintenance Assistant for Fast-Track Repair Procedures in the Context of Industry 4.0. Machines, 2020, 8, 88.	2.2	45
29	Unsupervised semantic clustering and localization for mobile robotics tasks. Robotics and Autonomous Systems, 2020, 131, 103567.	5.1	26
30	Safety bounds in human robot interaction: A survey. Safety Science, 2020, 127, 104667.	4.9	153
31	HASeparator: Hyperplane-Assisted Softmax. , 2020, , .		6
32	Unsupervised Human Detection with an Embedded Vision System on a Fully Autonomous UAV for Search and Rescue Operations. Sensors, 2019, 19, 3542.	3.8	143
33	Revisiting the Bag-of-Visual-Words model: A hierarchical localization architecture for mobile systems. Robotics and Autonomous Systems, 2019, 113, 104-119.	5.1	14
34	Probabilistic Appearance-Based Place Recognition Through Bag of Tracked Words. IEEE Robotics and Automation Letters, 2019, 4, 1737-1744.	5.1	43
35	ViPED: On-road vehicle passenger detection for autonomous vehicles. Robotics and Autonomous Systems, 2019, 112, 282-290.	5.1	15
36	Graph-Based Semantic Segmentation. Mechanisms and Machine Science, 2019, , 572-579.	0.5	8

#	Article	IF	Citations
37	SeqSLAM with Bag of Visual Words for Appearance Based Loop Closure Detection. Mechanisms and Machine Science, 2019, , 580-587.	0.5	11
38	Appearance-Based Loop Closure Detection with Scale-Restrictive Visual Features. Lecture Notes in Computer Science, 2019, , 75-87.	1.3	18
39	A New Approach to Machine Contour Perception. , 2019, , 566-568.		0
40	Fast loop-closure detection using visual-word-vectors from image sequences. International Journal of Robotics Research, 2018, 37, 62-82.	8.5	69
41	Realâ€time surveillance detection system for mediumâ€altitude longâ€endurance unmanned aerial vehicles. Concurrency Computation Practice and Experience, 2018, 30, e4145.	2.2	10
42	On the evaluation of illumination compensation algorithms. Multimedia Tools and Applications, 2018, 77, 9211-9231.	3.9	30
43	The Katwijk beach planetary rover dataset. International Journal of Robotics Research, 2018, 37, 3-12.	8.5	25
44	A LoCATeâ€based visual place recognition system for mobile robotics and GPGPUs. Concurrency Computation Practice and Experience, 2018, 30, e4146.	2.2	7
45	Introducing a globally consistent orbitalâ€based localization system. Journal of Field Robotics, 2018, 35, 275-298.	6.0	15
46	DOSeqSLAM: Dynamic On-line Sequence Based Loop Closure Detection Algorithm for SLAM. , 2018, , .		17
47	Vision-Based Product Tracking Method for Cyber-Physical Production Systems in Industry 4.0. , 2018, , .		10
48	Assigning Visual Words to Places for Loop Closure Detection. , 2018, , .		52
49	ROLFER: A fully autonomous aerial rescue support system. Microprocessors and Microsystems, 2018, 61, 32-42.	2.8	27
50	Hot spot method for pedestrian detection using saliency maps, discrete Chebyshev moments and support vector machine. IET Image Processing, 2018, 12, 1284-1291.	2.5	15
51	Recent trends in social aware robot navigation: A survey. Robotics and Autonomous Systems, 2017, 93, 85-104.	5.1	115
52	Robots in Crisis Management: A Survey. Lecture Notes in Business Information Processing, 2017, , 43-56.	1.0	16
53	Deep learning features exception for cross-season visual place recognition. Pattern Recognition Letters, 2017, 100, 124-130.	4.2	21
54	Identifying Hazardous Emerging Behaviors in Search and Rescue Missions with Drones: A Proposed Methodology. Lecture Notes in Business Information Processing, 2017, , 70-76.	1.0	2

#	Article	IF	Citations
55	Semantic maps from multiple visual cues. Expert Systems With Applications, 2017, 68, 45-57.	7.6	26
56	Adaptive card-based production control policies. Computers and Industrial Engineering, 2017, 103, 131-144.	6.3	14
57	High order visual words for structure-aware and viewpoint-invariant loop closure detection. , 2017, , .		17
58	ROLFER: An Innovative Proactive Platform to Reserve Swimmer's Safety. Lecture Notes in Business Information Processing, 2017, , 57-69.	1.0	1
59	Autonomous Vehicle Emergency Recovery Tool: A Cooperative Robotic System for Car Extraction. Journal of Field Robotics, 2016, 33, 1058-1086.	6.0	5
60	Encoding the description of image sequences: A two-layered pipeline for loop closure detection. , 2016, , .		33
61	Context-dependent social mapping. , 2016, , .		2
62	Modeling Regions of Interest on Orbital and Rover Imagery for Planetary Exploration Missions. Cybernetics and Systems, 2016, 47, 180-205.	2.5	16
63	Robot navigation via spatial and temporal coherent semantic maps. Engineering Applications of Artificial Intelligence, 2016, 48, 173-187.	8.1	54
64	Stereo-Based Visual Odometry for Autonomous Robot Navigation. International Journal of Advanced Robotic Systems, 2016, 13, 21.	2.1	21
65	Robot navigation in large-scale social maps: An action recognition approach. Expert Systems With Applications, 2016, 66, 261-273.	7.6	52
66	On-line deep learning method for action recognition. Pattern Analysis and Applications, 2016, 19, 337-354.	4.6	35
67	Theta-Disparity: An Efficient Representation of the 3D Scene Structure. Advances in Intelligent Systems and Computing, 2016, , 795-806.	0.6	3
68	A stereo matching approach based on particle filters and scattered control landmarks. Image and Vision Computing, 2015, 38, 13-23.	4.5	20
69	Human and Fire Detection from High Altitude UAV Images. , 2015, , .		34
70	Fault diagnosis of photovoltaic modules through image processing and Canny edge detection on field thermographic measurements. International Journal of Sustainable Energy, 2015, 34, 351-372.	2.4	135
71	Towards orbital based global rover localization. , 2015, , .		18
72	Semantic mapping for mobile robotics tasks: A survey. Robotics and Autonomous Systems, 2015, 66, 86-103.	5.1	270

#	Article	IF	Citations
73	Image moment invariants as local features for content based image retrieval using the Bag-of-Visual-Words model. Pattern Recognition Letters, 2015, 55, 22-27.	4.2	74
74	Thorough robot navigation based on SVM local planning. Robotics and Autonomous Systems, 2015, 70, 166-180.	5.1	26
75	Can Speedup Assist Accuracy? An On-Board GPU-Accelerated Image Georeference Method for UAVs. Lecture Notes in Computer Science, 2015, , 104-114.	1.3	2
76	Accelerating single-image super-resolution polynomial regression in mobile devices. IEEE Transactions on Consumer Electronics, 2015, 61, 63-71.	3.6	6
77	Autonomous Robot Path Planning Techniques Using Cellular Automata. Emergence, Complexity and Computation, 2015, , 175-196.	0.3	2
78	AVERT: An autonomous multi-robot system for vehicle extraction and transportation. , 2015, , .		16
79	What, Where and How? Introducing pose manifolds for industrial object manipulation. Expert Systems With Applications, 2015, 42, 8123-8133.	7.6	4
80	Robot Guided Crowd Evacuation. IEEE Transactions on Automation Science and Engineering, 2015, 12, 739-751.	5.2	64
81	SPARTAN/SEXTANT/COMPASS: Advancing Space Rover Vision via Reconfigurable Platforms. Lecture Notes in Computer Science, 2015, , 475-486.	1.3	10
82	Place categorization through object classification. , 2014, , .		1
83	The HCUAV project: Electronics and software development for medium altitude remote sensing. , 2014, , .		4
84	Accelerating image super-resolution regression by a hybrid implementation in mobile devices. , 2014, , .		8
85	Social mapping on RGB-D scenes. , 2014, , .		2
86	SPARTAN: Developing a Vision System for Future Autonomous Space Exploration Robots. Journal of Field Robotics, 2014, 31, 107-140.	6.0	26
87	Digital elevation model fusion using spectral methods. , 2014, , .		7
88	A tensor-based deep learning framework. Image and Vision Computing, 2014, 32, 916-929.	4.5	9
89	Sparse pose manifolds. Autonomous Robots, 2014, 37, 191-207.	4.8	6
90	A bio-inspired multi-camera system for dynamic crowd analysis. Pattern Recognition Letters, 2014, 44, 141-151.	4.2	15

#	Article	IF	Citations
91	An Intelligent Tool for the Automated Evaluation of Pedestrian Simulation. Lecture Notes in Computer Science, 2014, , 136-149.	1.3	5
92	A Full-Scale Hardware Solution for Crowd Evacuation via Multiple Cameras. , 2014, , 127-154.		0
93	Learning spatially semantic representations for cognitive robot navigation. Robotics and Autonomous Systems, 2013, 61, 1460-1475.	5.1	57
94	A biologically inspired scale-space for illumination invariant feature detection. Measurement Science and Technology, 2013, 24, 074024.	2.6	34
95	Bio-inspired deep learning model for object recognition. , 2013, , .		2
96	A comparison framework for the evaluation of illumination compensation algorithms. , 2013, , .		4
97	Visual Odometry for autonomous robot navigation through efficient outlier rejection. , 2013, , .		11
98	Morphological edge detector implemented in Quantum Cellular Automata. , 2013, , .		2
99	Efficient representation and feature extraction for neural network-based 3D object pose estimation. Neurocomputing, 2013, 120, 90-100.	5.9	10
100	A Multi-Objective Exploration Strategy for Mobile Robots Under Operational Constraints. IEEE Access, 2013, 1, 691-702.	4.2	27
101	The AVERT project: Autonomous Vehicle Emergency Recovery Tool. , 2013, , .		5
102	Intelligent Stereo Vision in Autonomous Robot Traversability Estimation. , 2013, , 192-209.		0
103	How Do You Help a Robot to Find a Place? A Supervised Learning Paradigm to Semantically Infer about Places. Lecture Notes in Computer Science, 2013, , 324-333.	1.3	1
104	6DoF object pose measurement by a monocular manifold-based pattern recognition technique. Measurement Science and Technology, 2012, 23, 114005.	2.6	8
105	On Visuo-Inertial Fusion for Robot Pose Estimation Using Hierarchical Fuzzy Systems. International Journal of Optomechatronics, 2012, 6, 17-36.	6.6	4
106	Learning the terrain and planning a collision-free trajectory for indoor post-disaster environments. , 2012, , .		10
107	Imaging Systems and Techniques 2011. Measurement Science and Technology, 2012, 23, 110101.	2.6	0
108	Efficient Robot Path Planning in the Presence of Dynamically Expanding Obstacles. Lecture Notes in Computer Science, 2012, , 330-339.	1.3	7

#	Article	IF	Citations
109	An efficient method to reconstruct prismatic rigid objects by multiple camera arrangements. Measurement Science and Technology, 2012, 23, 114006.	2.6	1
110	Establishing low dimensional manifolds for 3D object pose estimation. , 2012, , .		1
111	Optimum multi-camera arrangement using a bee colony algorithm. , 2012, , .		13
112	Object recognition using saliency maps and HTM learning. , 2012, , .		11
113	Ontology-based 3D pose estimation for autonomous object manipulation. , 2012, , .		1
114	Improving the robustness in feature detection by local contrast enhancement. , 2012, , .		22
115	Pose manifolds for efficient visual servoing. , 2012, , .		0
116	Safety certification requirements for domestic robots. Safety Science, 2012, 50, 1888-1897.	4.9	28
117	Path Tracing on Polar Depth Maps for Robot Navigation. Lecture Notes in Computer Science, 2012, , 395-404.	1.3	9
118	Collision risk assessment for autonomous robots by offline traversability learning. Robotics and Autonomous Systems, 2012, 60, 1367-1376.	5.1	17
119	Multi-view 3D scene reconstruction using ant colony optimization techniques. Measurement Science and Technology, 2012, 23, 114002.	2.6	4
120	On the optimization of Hierarchical Temporal Memory. Pattern Recognition Letters, 2012, 33, 670-676.	4.2	16
121	From Object Recognition to Object Localization. Advances in Computational Intelligence and Robotics Book Series, 2012, , 1-17.	0.4	0
122	Robust 3D vision for robots using dynamic programming. , 2011, , .		2
123	Lighting compensating multiview stereo. , 2011, , .		0
124	SPARTAN system: Towards a low-cost and high-performance vision architecture for space exploratory rovers. , 2011, , .		13
125	Evaluation of shape descriptors for shape-based image retrieval. IET Image Processing, 2011, 5, 493.	2.5	92
126	Non-probabilistic cellular automata-enhanced stereo vision simultaneous localization and mapping. Measurement Science and Technology, 2011, 22, 114027.	2.6	29

#	Article	IF	Citations
127	A Hybrid Static/Active Video Surveillance System. International Journal of Optomechatronics, 2011, 5, 80-95.	6.6	8
128	Guiding a robotic gripper by visual feedback for object manipulation tasks. , 2011, , .		16
129	STEREOVISION-BASED FUZZY OBSTACLE AVOIDANCE METHOD. International Journal of Humanoid Robotics, 2011, 08, 169-183.	1.1	12
130	Color-Based Monocular Visuoinertial 3-D Pose Estimation of a Volant Robot. IEEE Transactions on Instrumentation and Measurement, 2010, 59, 2706-2715.	4.7	27
131	Biologically and psychophysically inspired adaptive support weights algorithm for stereo correspondence. Robotics and Autonomous Systems, 2010, 58, 457-464.	5.1	34
132	Stereo vision for robotic applications in the presence of non-ideal lighting conditions. Image and Vision Computing, 2010, 28, 940-951.	4.5	65
133	Recognition of 2-d shapes inspired by the human visual system. Journal of Computational Methods in Sciences and Engineering, 2010, 10, 23-35.	0.2	0
134	An adaptive fuzzy system for the control of the vergence angle on a robotic head. Journal of Intelligent and Fuzzy Systems, 2010, 21, 385-394.	1.4	5
135	Multi-camera 3D scene reconstruction from vanishing points. , 2010, , .		4
136	Light-invariant 3D object's pose estimation using color distance transform. , 2010, , .		2
137	Computationally effective stereovision SLAM. , 2010, , .		4
138	Real-time video surveillance by a hybrid static/active camera mechatronic system. , 2010, , .		1
139	Visual Assistance to an Advanced Mechatronic Platform for Pick and Place Tasks. Lecture Notes in Computer Science, 2010, , 705-716.	1.3	0
140	Stereovision-Based Algorithm for Obstacle Avoidance. Lecture Notes in Computer Science, 2009, , 195-204.	1.3	17
141	Pose estimation of a volant platform with a monocular visuo-inertial system. , 2009, , .		4
142	Simultaneous Visual Object Recognition and Position Estimation Using SIFT. Lecture Notes in Computer Science, 2009, , 866-875.	1.3	5
143	The Vision System of the ACROBOTER Project. Lecture Notes in Computer Science, 2009, , 957-966.	1.3	1
144	Real-time disparity map computation module. Microprocessors and Microsystems, 2008, 32, 159-170.	2.8	42

#	Article	IF	Citations
145	Fast centre–surround contrast modification. IET Image Processing, 2008, 2, 19.	2.5	60
146	Review of Stereo Vision Algorithms: From Software to Hardware. International Journal of Optomechatronics, 2008, 2, 435-462.	6.6	303
147	Tele-Autonomous Active Stereo-Vision Head. International Journal of Optomechatronics, 2008, 2, 144-161.	6.6	6
148	Fuzzy vergence control for an active binocular vision system. , 2008, , .		6
149	A Recursive Fuzzy System for Efficient Digital Image Stabilization. Advances in Fuzzy Systems, 2008, 2008, 1-8.	0.9	7
150	A Dense Stereo Correspondence Algorithm for Hardware Implementation with Enhanced Disparity Selection. Lecture Notes in Computer Science, 2008, , 365-370.	1.3	17
151	Methods and techniques for intelligent navigation and manipulation for bomb disposal and rescue operations. , 2007, , .		16
152	An Algorithm for Adaptive Mean Filtering and Its Hardware Implementation. Journal of Signal Processing Systems, 2006, 44, 63-78.	1.0	3
153	Enhancement of Perceptually Salient Contours using a Parallel Artificial Cortical Network. Biological Cybernetics, 2006, 94, 192-214.	1.3	11
154	Fast Image Retrieval Based on Attributes of the Human Visual System. , 2006, , .		5
155	Image retrieval based on fuzzy color histogram processing. Optics Communications, 2005, 248, 375-386.	2.1	86
156	An Intelligent System for Aerial Image Retrieval and Classification. Lecture Notes in Computer Science, 2004, , 63-71.	1.3	5
157	Learning to track colored objects with log-polar vision. Mechatronics, 2004, 14, 989-1006.	3.3	38
158	A system to navigate a robot into a ship structure. Machine Vision and Applications, 2003, 14, 15-25.	2.7	5
159	PRONTO: a system for mobile robot navigation via CAD-model guidance. Microprocessors and Microsystems, 2002, 26, 17-26.	2.8	13
160	Disparity Estimation on Log-Polar Images and Vergence Control. Computer Vision and Image Understanding, 2001, 83, 97-117.	4.7	42
161	A System to Navigate a Robot into a Ship Structure. Lecture Notes in Computer Science, 2001, , 268-283.	1.3	2
162	Extension and very large scale integration implementation of the majority-gate algorithm for gray-scale morphological operations. Optical Engineering, 1997, 36, 857.	1.0	0

#	Article	IF	Citations
163	Image Stabilization in Active Robot Vision. , 0, , .		8
164	The Imapct of Low-Level Features in Semantic-Based Image. , 0, , 23-45.		4
165	Stereo Vision Depth Estimation Methods for Robotic Applications. , 0, , 397-417.		5
166	From Object Recognition to Object Localization. , 0, , 53-68.		0
167	Intelligent Stereo Vision in Autonomous Robot Traversability Estimation. , 0, , 350-365.		0
168	Stereo Vision Depth Estimation Methods for Robotic Applications. , 0, , 1461-1481.		0
169	Three-Dimensional Scene Reconstruction. , 0, , 142-162.		0