

Paulo Drews-Jr

List of Publications by Year in descending order

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Version: 2024-02-01

114
papers

1,774
citations

686830

13
h-index

525886

27
g-index

116
all docs

116
docs citations

116
times ranked

1025
citing authors

#	ARTICLE	IF	CITATIONS
1	Underwater Depth Estimation and Image Restoration Based on Single Images. IEEE Computer Graphics and Applications, 2016, 36, 24-35.	1.0	373
2	Transmission Estimation in Underwater Single Images. , 2013, , .		349
3	Hybrid Unmanned Aerial Underwater Vehicle: Modeling and simulation. , 2014, , .		88
4	Attitude control for an Hybrid Unmanned Aerial Underwater Vehicle: A robust switched strategy with global stability. , 2015, , .		43
5	An Open-source Bio-inspired Solution to Underwater SLAM~.... IFAC-PapersOnLine, 2015, 48, 212-217.	0.5	40
6	Microalgae classification using semi-supervised and active learning based on Gaussian mixture models. Journal of the Brazilian Computer Society, 2013, 19, 411-422.	0.8	31
7	Spatial Density Patterns for Efficient Change Detection in 3D Environment for Autonomous Surveillance Robots. IEEE Transactions on Automation Science and Engineering, 2014, 11, 766-774.	3.4	30
8	Visualization Methods for Image Transformation Convolutional Neural Networks. IEEE Transactions on Neural Networks and Learning Systems, 2019, 30, 2231-2243.	7.2	25
9	Vision-Based Obstacle Avoidance Using Deep Learning. , 2016, , .		24
10	Underwater place recognition using forwardâ€looking sonar images: A topological approach. Journal of Field Robotics, 2019, 36, 355-369.	3.2	24
11	A Novel Concept for Hybrid Unmanned Aerial Underwater Vehicles Focused on Aquatic Performance. , 2020, , .		24
12	A Study on Configuration of Propellers for Multirotor-like Hybrid Aerial-Aquatic Vehicles. , 2019, , .		23
13	Matching Color Aerial Images and Underwater Sonar Images Using Deep Learning for Underwater Localization. IEEE Robotics and Automation Letters, 2020, 5, 6365-6370.	3.3	23
14	Novelty detection and 3D shape retrieval using superquadrics and multi-scale sampling for autonomous mobile robots. , 2010, , .		22
15	Double Critic Deep Reinforcement Learning for Mapless 3D Navigation of Unmanned Aerial Vehicles. Journal of Intelligent and Robotic Systems: Theory and Applications, 2022, 104, .	2.0	22
16	Visual odometry and mapping for Underwater Autonomous Vehicles. , 2009, , .		20
17	Novelty detection and segmentation based on Gaussian mixture models: A case study in 3D robotic laser mapping. Robotics and Autonomous Systems, 2013, 61, 1696-1709.	3.0	19
18	Automatic control of a ROV for inspection of underwater structures using a low-cost sensing. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2015, 37, 361-374.	0.8	19

#	ARTICLE	IF	CITATIONS
19	Deep Learning for Microalgae Classification. , 2017, , .		19
20	Seam tracking and welding bead geometry analysis for autonomous welding robot. , 2017, , .		17
21	DeepDive: An End-to-End Dehazing Method Using Deep Learning. , 2017, , .		16
22	Object Classification in Semi Structured Enviroment Using Forward-Looking Sonar. Sensors, 2017, 17, 2235.	2.1	16
23	A Comparative Study on Sigma-Point Kalman Filters for Trajectory Estimation of Hybrid Aerial-Aquatic Vehicles. , 2018, , .		16
24	CNN Based Image Restoration. Journal of Intelligent and Robotic Systems: Theory and Applications, 2020, 99, 609-627.	2.0	15
25	Underwater Single Image Restoration Using Dark Channel Prior. , 2014, , .		14
26	Automatic restoration of underwater monocular sequences of images. , 2015, , .		14
27	Using the Choquet Integral in the Pooling Layer in Deep Learning Networks. Communications in Computer and Information Science, 2018, , 144-154.	0.4	14
28	Analyzing and exploring feature detectors in images. , 2011, , .		13
29	Real-time monocular obstacle avoidance using Underwater Dark Channel Prior. , 2016, , .		13
30	Novelty detection and 3D shape retrieval based on Gaussian Mixture Models for autonomous surveillance robotics. , 2009, , .		12
31	Fast and adaptive 3D change detection algorithm for autonomous robots based on Gaussian Mixture Models. , 2013, , .		12
32	Forward Looking Sonar Scene Matching Using Deep Learning. , 2017, , .		12
33	Deep Learning Based Exposure Correction for Image Exposure Correction with Application in Computer Vision for Robotics. , 2018, , .		12
34	Security on ROS: analyzing and exploiting vulnerabilities of ROS-based systems. , 2020, , .		12
35	Countering low visibility in video survey of an estuarine fish assemblage. Pacific Conservation Biology, 2020, 26, 190.	0.5	12
36	Trajectory Planning for Hybrid Unmanned Aerial Underwater Vehicles with Smooth Media Transition. Journal of Intelligent and Robotic Systems: Theory and Applications, 2022, 104, 1.	2.0	12

#	ARTICLE	IF	CITATIONS
37	Sensor fusion based on multi-self-organizing maps for SLAM. , 2010, , .		11
38	Tracking System for Underwater Inspection Using Computer Vision. , 2012, , .		11
39	Real-time localization and dense mapping in underwater environments from a monocular sequence. , 2015, , .		11
40	Underwater Place Recognition in Unknown Environments with Triplet Based Acoustic Image Retrieval. , 2018, , .		11
41	Autonomous Agricultural Sprayer using Machine Vision and Nozzle Control. Journal of Intelligent and Robotic Systems: Theory and Applications, 2021, 102, 1.	2.0	11
42	Visual-based Autonomous Unmanned Aerial Vehicle for Inspection in Indoor Environments. , 2020, , .		11
43	Change detection in 3D environments based on Gaussian Mixture Model and robust structural matching for autonomous robotic applications. , 2010, , .		10
44	Towards comparison of underwater SLAM methods: An open dataset collection. , 2016, , .		10
45	Analysis of Local Trajectory Planners for Mobile Robot with Robot Operating System. IEEE Latin America Transactions, 2022, 20, 92-99.	1.2	10
46	Efficient change detection in 3D environment for autonomous surveillance robots based on implicit volume. , 2012, , .		9
47	Deep Reinforcement Learning for Mapless Navigation of Unmanned Aerial Vehicles. , 2020, , .		9
48	Cross-View and Cross-Domain Underwater Localization Based on Optical Aerial and Acoustic Underwater Images. IEEE Robotics and Automation Letters, 2022, 7, 4969-4974.	3.3	9
49	Automated seam tracking system based on passive monocular vision for automated linear robotic welding process. , 2017, , .		8
50	Object Recognition and Semantic Mapping for Underwater Vehicles Using Sonar Data. Journal of Intelligent and Robotic Systems: Theory and Applications, 2018, 91, 279-289.	2.0	8
51	Can Exposure, Noise and Compression Affect Image Recognition? An Assessment of the Impacts on State-of-the-Art ConvNets. , 2019, , .		8
52	SLAM in Underwater Environment Using SIFT and Topologic Maps. , 2008, , .		7
53	A Low Cost System to Optimize Pesticide Application Based on Mobile Technologies and Computer Vision. , 2018, , .		7
54	Simulating the Behaviour of Choquet-Like (pre) Aggregation Functions for Image Resizing in the Pooling Layer of Deep Learning Networks. Advances in Intelligent Systems and Computing, 2019, , 224-236.	0.5	7

#	ARTICLE	IF	CITATIONS
55	Generalized Optical Flow Model for Scattering Media. , 2014, , .		6
56	A Novel Robust Scene Change Detection Algorithm for Autonomous Robots Using Mixtures of Gaussians. International Journal of Advanced Robotic Systems, 2014, 11, 18.	1.3	6
57	A Topological Descriptor of Acoustic Images for Navigation and Mapping. , 2015, , .		6
58	Supervised Microalgae Classification in Imbalanced Dataset. , 2016, , .		6
59	A Perception System for an Autonomous Pesticide Boom Sprayer. , 2019, , .		6
60	Underwater Sonar and Aerial Images Data Fusion for Robot Localization. , 2019, , .		6
61	Satellite and Underwater Sonar Image Matching Using Deep Learning. , 2019, , .		6
62	Semantic Mapping on Underwater Environment Using Sonar Data. , 2016, , .		5
63	Using a MRF-BP model with color adaptive training for underwater color restoration. , 2016, , .		5
64	Sonar-to-Satellite Translation using Deep Learning. , 2018, , .		5
65	Single Image Restoration for Participating Media Based on Prior Fusion. IEEE Computer Graphics and Applications, 2019, 39, 71-83.	1.0	5
66	Contrast Enhancement and Image Completion: A CNN Based Model to Restore Ill Exposed Images. , 2019, , .		5
67	Cooperative Training of Triplet Networks for Cross-Domain Matching. , 2020, , .		5
68	3D robotic mapping: A biologic approach. , 2013, , .		4
69	A modified topological descriptor for forward looking sonar images. , 2016, , .		4
70	CNN-Based Luminance And Color Correction For ILL-Exposed Images. , 2019, , .		4
71	Evaluation of the Pressure-Flow Relationship in a Boom of an Autonomous Robotic Agricultural Sprayer. , 2019, , .		4
72	Semantic Segmentation of Static and Dynamic Structures of Marina Satellite Images using Deep Learning. , 2019, , .		4

#	ARTICLE	IF	CITATIONS
73	On Robustness of Robotic and Autonomous Systems Perception. Journal of Intelligent and Robotic Systems: Theory and Applications, 2021, 101, 1.	2.0	4
74	Unsupervised Learning Method for Encoder-Decoder-Based Image Restoration. Lecture Notes in Computer Science, 2020, , 348-360.	1.0	4
75	Self-Organizing Mapping of Robotic Environments Based on Neural Networks. , 2012, , .		3
76	A Topological Descriptor of Forward Looking Sonar Images for Navigation and Mapping. Communications in Computer and Information Science, 2016, , 120-134.	0.4	3
77	Understading Image Restoration Convolutional Neural Networks with Network Inversion. , 2017, , .		3
78	Description and Matching of Acoustic Images Using a Forward Looking Sonar: A Topological Approach.. IFAC-PapersOnLine, 2017, 50, 2317-2322.	0.5	3
79	Towards a biologically-inspired model for underwater localization based on sensory-motor coupling. , 2017, , .		3
80	GuidedNet: Single Image Dehazing Using an End-to-End Convolutional Neural Network. , 2018, , .		3
81	3D Surfaces Reconstruction and Volume Changes in Underwater Environments Using MSIS Sonar. , 2019, , .		3
82	Guided Sonar-to-Satellite Translation. Journal of Intelligent and Robotic Systems: Theory and Applications, 2021, 101, 1.	2.0	3
83	NLMAP - visual-based self localization and mapping for Autonomous Underwater Vehicles. , 2008, , .		2
84	Self Organizing Maps for AUVs Mapping. , 2009, , .		2
85	Spatial and Perceptive Mapping Using Semantically Self-Organizing Maps Applied to Mobile Robots. , 2012, , .		2
86	Space D*. Journal of the Brazilian Computer Society, 2012, 18, 363-373.	0.8	2
87	Underwater Visual 3D SLAM Using a Bio-inspired System. , 2013, , .		2
88	Effects of Water Currents in a Continuous Attractor Neural Network for SLAM Applications. , 2016, , .		2
89	Image Processing for Automated Welding Robot: Reducing Interference due to Fume in Camera Lenses. , 2018, , .		2
90	Perception of an Opto-Mechanical Torch for Linear Welding Robot Using Monocular Camera. , 2018, , .		2

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91	Restoration of Images Affected by Welding Fume. , 2018, , .		2
92	Perfect Storm: DSAs Embrace Deep Learning for GPU-Based Computer Vision. , 2019, , .		2
93	Simulated Dataset to Verify the Overlapping and Segregation Problem on Computer Vision Granulometry of Fertilizers. IFAC-PapersOnLine, 2020, 53, 12032-12037.	0.5	2
94	Editorial Notes for Topical Collection on Robotica 2019. Journal of Intelligent and Robotic Systems: Theory and Applications, 2022, 104, .	2.0	2
95	Real-Time Depth Estimation for Underwater Inspection Using Dual Laser and Camera. , 2013, , .		1
96	Improving change detection using Vertical Surface Normal Histograms and Gaussian Mixture Models in structured environments. , 2013, , .		1
97	Challenges and State-of-the-Art Solutions to Underwater Slam. , 2014, , .		1
98	A statistical learning approach for underwater color restoration with adaptive training based on visual attention. , 2016, , .		1
99	Towards comparison of Kalman filter methods for localisation in underwater environments. , 2017, , .		1
100	Underwater Depth Estimation based on Water Classification using Monocular Image. , 2020, , .		1
101	A Probabilistic Approach to Restore Images Acquired in Underwater Scenes. Journal of Mathematical Imaging and Vision, 2022, 64, 89-104.	0.8	1
102	Matching Cross-Domain Data with Cooperative Training of Triplet Networks: A Case Study on Underwater Robotics. Journal of Intelligent and Robotic Systems: Theory and Applications, 2022, 104, 1.	2.0	1
103	Growing Cell Structures Applied to Sensor Fusion and SLAM. , 2010, , .		0
104	A Terrain-Based Path Planning for Mobile Robots with Bounded Curvature. , 2012, , .		0
105	Using Space D* for Crowded Real Robots Environments. , 2012, , .		0
106	Visualization Techniques Applied to Image-to-Image Translation. , 2018, , .		0
107	Height Measurement and Adjustment of Welding Torch for Linear Welding Robot. , 2019, , .		0
108	An Optimized Image Fusion Method for Fume Removal in Automated Welding Robots Field. , 2019, , .		0

#	ARTICLE	IF	CITATIONS
109	Non-Invasive Visual Computing Modelling for Obstruction Inspection of Pipes in the Fertilizer Industry. , 2019, , .		0
110	ICAR 2019 Special Issue. Journal of Intelligent and Robotic Systems: Theory and Applications, 2021, 102, 1.	2.0	0
111	Análise Exploratória de Dados de Imagens Digitais Noturnas. Scientia Plena, 2019, 15, .	0.1	0
112	A Pipelined Approach to Deal with Image Distortion in Computer Vision. Lecture Notes in Computer Science, 2020, , 212-225.	1.0	0
113	Thermographic Non-Invasive Inspection Modelling of Fertilizer Pipelines Using Neural Networks. , 2020, , .		0
114	Alternative Underwater Image Restoration Based on Unsupervised Learning and Autoencoder with Degradation Block. , 2020, , .		0