Marco F Huber

List of Publications by Year
in descending order

76 papers	1,533 citations	1162367 8 h-index	676716 22 g-index
78 all docs	78 docs citations	78 times ranked	1019 citing authors

#	Article	IF	Citations
1	A Survey on the Explainability of Supervised Machine Learning. Journal of Artificial Intelligence Research, 0, 70, 245-317.	7.0	389
2	A Survey on Learning-Based Robotic Grasping. Current Robotics Reports, 2020, 1, 239-249.	5.1	127
3	On entropy approximation for Gaussian mixture random vectors. , 2008, , .		119
4	Recursive Gaussian process: On-line regression and learning. Pattern Recognition Letters, 2014, 45, 85-91.	2.6	93
5	Robust Filtering and Smoothing with Gaussian Processes. IEEE Transactions on Automatic Control, 2012, 57, 1865-1871.	3.6	76
6	A survey of technologies for the internet of things. , 2015, , .		72
7	Analytic moment-based Gaussian process filtering. , 2009, , .		71
8	Large-scale 6D Object Pose Estimation Dataset for Industrial Bin-Picking. , 2019, , .		50
9	Low Resolution Person Detection with a Moving Thermal Infrared Camera by Hot Spot Classification. , 2014, , .		47
10	Short Paper: IoT: Challenges, projects, architectures. , 2015, , .		42
11	Gaussian Filter based on Deterministic Sampling for High Quality Nonlinear Estimation. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 13527-13532.	0.4	36
12	Dirac mixture approximation of multivariate Gaussian densities. , 2009, , .		31
13	Optimal Pruning for Multi-Step Sensor Scheduling. IEEE Transactions on Automatic Control, 2012, 57, 1338-1343.	3.6	31
14	Towards Safe Human-Robot Collaboration Using Deep Reinforcement Learning. , 2020, , .		25
15	Single Shot 6D Object Pose Estimation. , 2020, , .		23
16	Recursive Gaussian process regression. , 2013, , .		22
17	Simulation-driven machine learning for robotics and automation. TM Technisches Messen, 2019, 86, 673-684.	0.3	22
18	Enhancing Decision Tree Based Interpretation of Deep Neural Networks through L1-Orthogonal Regularization. , 2019, , .		15

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19	Closed-Form Prediction of Nonlinear Dynamic Systems by Means of Gaussian Mixture Approximation of the Transition Density. , 2006, , .		13
20	Chebyshev polynomial Kalman filter. , 2013, 23, 1620-1629.		13
21	Validation of XAI explanations for multivariate time series classification in the maritime domain. Journal of Computational Science, 2022, 58, 101539.	1.5	12
22	Deep Workpiece Region Segmentation for Bin Picking. , 2019, , .		10
23	A Reinforcement Learning Approach to View Planning for Automated Inspection Tasks. Sensors, 2021, 21, 2030.	2.1	10
24	The hybrid density filter for nonlinear estimation based on hybrid conditional density approximation. , 2007, , .		9
25	Stochastic model predictive control of time-variant nonlinear systems with imperfect state information. , 2008, , .		9
26	A nonlinear model predictive control framework approximating noise corrupted systems with hybrid transition densities. , 2007, , .		8
27	Test-environment based on a team of miniature walking robots for evaluation of collaborative control methods. , 2007, , .		8
28	Efficient Nonlinear Measurement Updating based on Gaussian Mixture Approximation of Conditional Densities. Proceedings of the American Control Conference, 2007, , .	0.0	8
29	Efficient Control of Nonlinear Noise-Corrupted Systems Using a Novel Model Predictive Control Framework. Proceedings of the American Control Conference, 2007, , .	0.0	8
30	Framework for mining event correlations and time lags in large event sequences. , 2017, , .		8
31	Parameter identification and reconstruction for distributed phenomena based on hybrid density filter. , 2007, , .		7
32	Skill-based Programming of Force-controlled Assembly Tasks using Deep Reinforcement Learning. Procedia CIRP, 2020, 93, 1061-1066.	1.0	7
33	Stochastic Nonlinear Model Predictive Control based on Gaussian Mixture Approximations. Lecture Notes in Electrical Engineering, 2009, , 239-252.	0.3	7
34	Transferring Experience from Simulation to the Real World for Precise Pick-And-Place Tasks in Highly Cluttered Scenes. , 2020, , .		7
35	Semi-analytic Gaussian Assumed Density Filter. , 2011, , .		6
36	On-line Dispersion Source Estimation using Adaptive Gaussian Mixture Filter. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 1059-1066.	0.4	6

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37	Collaborative multi-camera face recognition and tracking. , 2015, , .		6
38	On multi-step sensor scheduling via convex optimization. , 2010, , .		5
39	Demonstration Abstract: Participatory sensing enabled environmental monitoring in smart cities. , 2014, , .		5
40	A MIMO Radar-Based Metric Learning Approach for Activity Recognition. , 2022, , .		5
41	Linear programming based time lag identification in event sequences. Automatica, 2018, 98, 14-19.	3.0	4
42	A Study on Trust in Black Box Models and Post-hoc Explanations. Advances in Intelligent Systems and Computing, 2020, , 35-46.	0.5	4
43	Towards Measuring Bias in Image Classification. Lecture Notes in Computer Science, 2021, , 433-445.	1.0	4
44	Hybrid transition density approximation for efficient recursive prediction of nonlinear dynamic systems. , 2007, , .		3
45	Optimal stochastic linearization for range-based localization. , 2010, , .		3
46	Bayesian score level fusion for facial recognition. , 2016, , .		3
47	Forcing Interpretability for Deep Neural Networks through Rule-Based Regularization. , 2019, , .		3
48	Are you sure? Prediction revision in automated <scp>decision€making</scp>. Expert Systems, 2021, 38, e12577.	2.9	3
49	Automatic Grasp Generation for Vacuum Grippers for Random Bin Picking. Arena2036, 2021, , 247-255.	0.8	3
50	Instantaneous pose estimation using rotation vectors. , 2009, , .		2
51	Probabilistic instantaneous model-based signal processing applied to localization and tracking. Robotics and Autonomous Systems, 2009, 57, 249-258.	3.0	2
52	Support-vector conditional density estimation for nonlinear filtering. , 2010, , .		2
53	On the Development of a Surrogate Modelling Toolbox for Virtual Assembly. Applied Sciences (Switzerland), 2021, 11, 1181.	1.3	2
54	Reduced Feature Set for Emotion Recognition Based on Angle and Size Information. Advances in Intelligent Systems and Computing, 2019, , 585-596.	0.5	2

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55	Supported Decision-Making by Explainable Predictions of Ship Trajectories. Advances in Intelligent Systems and Computing, 2021, , 44-54.	0.5	2
56	Investigations on Output Parameterizations of Neural Networks for Single Shot 6D Object Pose Estimation. , 2021, , .		2
57	Bayesian Perceptron: Towards fully Bayesian Neural Networks. , 2020, , .		2
58	Hybrides Maschinelles Lernen im Kontext der Produktion. , 2022, , 64-79.		2
59	Autoencoder-Inspired Identification of LTI Systems. , 2021, , .		2
60	Precise Object Placement with Pose Distance Estimations for Different Objects and Grippers. , 2021, , .		2
61	Hybrid Transition Density Approximation for Efficient Recursive Prediction of Nonlinear Dynamic Systems. , 2007, , .		1
62	Semi-analytic stochastic linearization for range-based pose tracking. , 2010, , .		1
63	Conditional anomaly detection in event streams. Automatisierungstechnik, 2017, 65, 233-244.	0.4	1
64	Guest Editorial Special Section on Multisensor Fusion and Integration for Intelligent Systems. IEEE Transactions on Industrial Informatics, 2018, 14, 1124-1126.	7.2	1
65	Comparison of Angle and Size Features with Deep Learning for Emotion Recognition. Lecture Notes in Computer Science, 2019, , 602-610.	1.0	1
66	Batch-wise Regularization of Deep Neural Networks for Interpretability. , 2020, , .		1
67	Unobstructed Programming-by-Demonstration for Force-Based Assembly Utilizing External Force-Torque Sensors. , 2021, , .		1
68	Study on Algorithms for the Virtual Assembly and Best Combinations of In-line Measured Injection-Molded Parts. Procedia CIRP, 2022, 107, 239-245.	1.0	1
69	Stochastic Optimal Control based on Value-Function Approximation using Sinc Interpolation. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 8009-8014.	0.4	0
70	Modellbasierte Quellenverfolgung in räumlich ausgedehnten Phänomenen mittels Sensoreinsatzplanung. TM Technisches Messen, 2010, 77, 551-557.	0.3	0
71	(Semi-)Analytic Gaussian Mixture Filter. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 10014-10020.	0.4	0
72	On weak distance between distributions in application to tracking. , 2013, , .		0

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73	Retrodiction of Data Association Probabilities via Convex Optimization. , 2018, , .		0
74	Gaussian Process based Dynamic Facial Emotion Tracking. , 2019, , .		0
75	Reinforcement Learning based Condition-oriented Maintenance Scheduling for Flow Line Systems. , 2021, , .		0
76	Automatische Programmierung von Produktionsmaschinen. , 2021, , 44-58.		0