Eduardo M Nebot

List of Publications by Year
in descending order

106 papers	2,734 citations	361388 20 h-index	289230 40 g-index
109 all docs	109 docs citations	109 times ranked	2188 citing authors

#	Article	IF	Citations
1	Beyond the Driverless Car: A Typology of Forms and Functions for Autonomous Mobility. Applied Mobilities, 2023, 8, 26-46.	1.0	6
2	Camera-LIDAR Integration: Probabilistic Sensor Fusion for Semantic Mapping. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 7637-7652.	8.0	21
3	Long-Term Map Maintenance Pipeline for Autonomous Vehicles. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 10427-10440.	8.0	5
4	See Eye to Eye: A Lidar-Agnostic 3D Detection Framework for Unsupervised Multi-Target Domain Adaptation. IEEE Robotics and Automation Letters, 2022, 7, 7904-7911.	5.1	6
5	Are We Ready for Accurate and Unbiased Fine-Grained Vehicle Classification in Realistic Environments?. IEEE Access, 2021, 9, 116338-116355.	4.2	5
6	Context-Based Interface Prototyping: Understanding the Effect of Prototype Representation on User Feedback. , 2021, , .		20
7	Demonstrations of Cooperative Perception: Safety and Robustness in Connected and Automated Vehicle Operations. Sensors, 2021, 21, 200.	3.8	51
8	Attentional-GCNN: Adaptive Pedestrian Trajectory Prediction towards Generic Autonomous Vehicle Use Cases. , 2021, , .		11
9	Integrating Vision, Lidar and GPS Localization in a Behavior Tree Framework for Urban Autonomous Driving. , 2021, , .		3
10	Optimising the selection of samples for robust lidar camera calibration. , 2021, , .		18
11	Automated Evaluation of Semantic Segmentation Robustness for Autonomous Driving. IEEE Transactions on Intelligent Transportation Systems, 2020, 21, 1951-1963.	8.0	48
12	Developing and Testing Robust Autonomy: The University of Sydney Campus Data Set. IEEE Intelligent Transportation Systems Magazine, 2020, 12, 23-40.	3.8	12
13	Using a 3D CNN for Rejecting False Positives on Pedestrian Detection. , 2020, , .		5
14	Two-Level Hierarchical Planning in a Known Semi-Structured Environment. , 2020, , .		2
15	Efficient statistical validation with edge cases to evaluate Highly Automated Vehicles. , 2020, , .		19
16	Weakly-supervised Road Condition Classification Using Automatically Generated Labels. , 2020, , .		0
17	Socially Aware Crowd Navigation with Multimodal Pedestrian Trajectory Prediction for Autonomous Vehicles. , 2020, , .		11
18	Probabilistic Egocentric Motion Correction of Lidar Point Cloud and Projection to Camera Images for Moving Platforms. , 2020, , .		4

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19	Uncertainty Estimation for Projecting Lidar Points onto Camera Images for Moving Platforms. , 2019, , .		2
20	Identifying robust landmarks in feature-based maps. , 2019, , .		11
21	ACFR Five Roundabouts Dataset: Naturalistic Driving at Unsignalized Intersections. IEEE Intelligent Transportation Systems Magazine, 2019, 11, 8-18.	3.8	19
22	Updating the visibility of a feature-based map for long-term maintenance. , 2019, , .		7
23	Extended Vehicle Tracking with Probabilistic Spatial Relation Projection and Consideration of Shape Feature Uncertainties. , 2019, , .		0
24	Geographical Map Registration and Fusion of Lidar-Aerial Orthoimagery in GIS. , 2019, , .		3
25	Automatic extrinsic calibration between a camera and a 3D Lidar using 3D point and plane correspondences. , 2019, , .		57
26	Adapting Semantic Segmentation Models for Changes in Illumination and Camera Perspective. IEEE Robotics and Automation Letters, 2019, 4, 461-468.	5.1	17
27	A Recurrent Neural Network Solution for Predicting Driver Intention at Unsignalized Intersections. IEEE Robotics and Automation Letters, 2018, 3, 1759-1764.	5.1	103
28	Octree map based on sparse point cloud and heuristic probability distribution for labeled images. , 2018, , .		15
29	Pedestrian Dynamic and Kinematic Information Obtained from Vision Sensors. , 2018, , .		6
30	Automated Process for Incorporating Drivable Path into Real-Time Semantic Segmentation. , 2018, , .		9
31	Robotics: From Automation to Intelligent Systems. Engineering, 2018, 4, 446-448.	6.7	3
32	Long short term memory for driver intent prediction. , 2017, , .		98
33	Transferring visual knowledge for a robust road environment perception in intelligent vehicles. , 2017, , .		7
34	Robotics in Mining. Springer Handbooks, 2016, , 1549-1576.	0.6	33
35	A Flexible System Architecture for Acquisition and Storage of Naturalistic Driving Data. IEEE Transactions on Intelligent Transportation Systems, 2016, 17, 1748-1761.	8.0	10
36	GPS/GNSS Consistency in a Multi-path Environment and During Signal Outages. , 2015, , .		6

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37	Predicting Driver Intent from Models of Naturalistic Driving. , 2015, , .		16
38	An Unsupervised Approach for Inferring Driver Behavior From Naturalistic Driving Data. IEEE Transactions on Intelligent Transportation Systems, 2015, 16, 3325-3336.	8.0	57
39	Delayed-State Nonparametric Filtering in Cooperative Tracking. IEEE Transactions on Robotics, 2015, 31, 962-977.	10.3	5
40	Extending Time to Collision for probabilistic reasoning in general traffic scenarios. Transportation Research Part C: Emerging Technologies, 2015, 51, 66-82.	7.6	65
41	Special Issue on the 2013 IEEE Intelligent Vehicles Symposium & Workshop [Guest Editorial]. IEEE Intelligent Transportation Systems Magazine, 2014, 6, 5-7.	3.8	0
42	The Warrigal Dataset: Multi-Vehicle Trajectories and V2V Communications. IEEE Intelligent Transportation Systems Magazine, 2014, 6, 109-117.	3.8	20
43	Estimating time to interaction for vehicles in ITS applications. , 2014, , .		0
44	Vehicle collision probability calculation for general traffic scenarios under uncertainty. , 2014, , .		28
45	Robust Estimation in Non-Linear State-Space Models With State-Dependent Noise. IEEE Transactions on Signal Processing, 2014, 62, 2165-2175.	5.3	17
46	Nonparametric cooperative tracking in mobile Ad-Hoc networks. , 2014, , .		5
47	Using Delayed Observations for Long-Term Vehicle Tracking in Large Environments. IEEE Transactions on Intelligent Transportation Systems, 2014, 15, 967-981.	8.0	8
48	Fault Detection for Vehicular Ad Hoc Wireless Networks. IEEE Intelligent Transportation Systems Magazine, 2014, 6, 34-44.	3.8	8
49	Anomaly detection in driving behaviour by road profiling. , 2013, , .		2
50	Fault detection for vehicular ad-hoc wireless networks. , 2013, , .		3
51	Robust non-linear smoothing for vehicle state estimation. , 2013, , .		1
52	Towards mapping of dynamic environments with FMCW radar. , 2013, , .		2
53	Probabilistic Long-Term Vehicle Motion Prediction and Tracking in Large Environments. IEEE Transactions on Intelligent Transportation Systems, 2013, 14, 539-552.	8.0	18
54	Vehicle operation safety monitoring using context based metrics: A case study. , 2013, , .		0

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55	Anomaly detection in driving behaviour by road profiling. , 2013, , .		0
56	The 2013 IEEE Intelligent Vehicles Symposium (IEEE-IV?13) Sofitel Broadbeach, Gold Coast, Australia [Conference Reports]. IEEE Intelligent Transportation Systems Magazine, 2013, 5, 169-172.	3.8	0
57	Comprehensive data collection and context based metric evaluation for safety monitoring. , 2013, , .		2
58	Vehicle operation safety monitoring using context based metrics: A case study. , 2013, , .		0
59	Towards mapping of dynamic environments with FMCW radar. , 2013, , .		1
60	Sensor modelling for radar-based occupancy mapping. , 2012, , .		10
61	A Context-Based Approach to Vehicle Behavior Prediction. IEEE Intelligent Transportation Systems Magazine, 2012, 4, 32-44.	3.8	14
62	Estimation of Multivehicle Dynamics by Considering Contextual Information. IEEE Transactions on Robotics, 2012, 28, 855-870.	10.3	69
63	Improving situational awareness with radar information. , 2012, , .		3
64	Approximate Inference in State-Space Models With Heavy-Tailed Noise. IEEE Transactions on Signal Processing, 2012, 60, 5024-5037.	5.3	196
65	Long term vehicle motion prediction and tracking in large environments. , 2011, , .		3
66	A bayesian approach for driving behavior inference. , 2011, , .		18
67	Robust Inference of Principal Road Paths for Intelligent Transportation Systems. IEEE Transactions on Intelligent Transportation Systems, 2011, 12, 298-308.	8.0	88
68	An outlier-robust Kalman filter. , 2011, , .		84
69	Probabilistic road geometry estimation using a millimetre-wave radar. , 2011, , .		6
70	A vison-based system for mapping the inside of a pipe. , 2011, , .		7
71	Prioritized independent contact regions for form closure grasps. , 2011, , .		1
72	Track-based self-supervised classification of dynamic obstacles. Autonomous Robots, 2010, 29, 219-233.	4.8	5

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73	Unsupervised classification of dynamic obstacles in urban environments. Journal of Field Robotics, 2010, 27, 450-472.	6.0	10
74	Robust and accurate road map inference. , 2010, , .		13
75	Improving vehicle safety using context based detection of risk. , 2010, , .		12
76	Heuristic rule for truck dispatching in open-pit mines with local information-based decisions. , 2010, , .		9
77	Vehicle activity segmentation from position data. , 2010, , .		2
78	Designing a user interface for improving the awareness of mining vehicle operators. , 2010, , .		2
79	Probabilistic estimation of unmarked roads using radar. Journal of Physical Agents, 2010, 4, 35-41.	0.3	7
80	Determining high safety risk scenarios by applying context information. Journal of Physical Agents, 2010, 4, 27-34.	0.3	3
81	Mining GPS data for extracting significant places. , 2009, , .		24
82	A self-supervised architecture for moving obstacles classification. , 2008, , .		2
83	A probabilistic method for detecting impending vehicle interactions. , 2008, , .		13
84	Probabilistic scheme for laser based motion detection. , 2008, , .		9
85	Dynamic Obstacle Detection Based on Probabilistic Moving Feature Recognition. Springer Tracts in Advanced Robotics, 2008, , 83-91.	0.4	1
86	Using Non-Parametric Filters and Sparse Observations to Localise a Fleet of Mining Vehicles. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	15
87	Recursive scan-matching SLAM. Robotics and Autonomous Systems, 2007, 55, 39-49.	5.1	105
88	Mining Robotics Editorial. Journal of Field Robotics, 2007, 24, 801-802.	6.0	0
89	Surface Mining: Main Research Issues for Autonomous Operations. , 2007, , 268-280.		6
90	Consistency of the EKF-SLAM Algorithm. , 2006, , .		354

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91	DenseSLAM: Simultaneous Localization and Dense Mapping. International Journal of Robotics Research, 2006, 25, 711-744.	8.5	46
92	Range Based Localisation Using RF and the Application to Mining Safety. , 2006, , .		7
93	Haul truck alignment monitoring and operator warning system. Journal of Field Robotics, 2006, 23, 141-161.	6.0	13
94	Scan-SLAM: Combining EKF-SLAM and Scan Correlation. , 2006, , 167-178.		35
95	Scan-SLAM: Combining EKF-SLAM and Scan Correlation. , 2006, , 167-178.		1
96	Robust Navigation and Mapping Architecture for Large Environments. Journal of Field Robotics, 2003, 20, 621-634.	0.7	4
97	Robust Simultaneous Localization and Mapping for Very Large Outdoor Environments. , 2003, , 200-209.		7
98	Simultaneous localization and map building using natural features and absolute information. Robotics and Autonomous Systems, 2002, 40, 79-90.	5.1	105
99	Localisation in large-scale environments. Robotics and Autonomous Systems, 2001, 37, 261-281.	5.1	28
100	Localization and map building using laser range sensors in outdoor applications. Journal of Field Robotics, 2000, 17, 565-583.	0.7	178
101	A high integrity navigation architecture for outdoor autonomous vehicles. Robotics and Autonomous Systems, 1999, 26, 81-97.	5.1	36
102	Decentralized Architecture for Asynchronous Sensors. Autonomous Robots, 1999, 6, 147-164.	4.8	29
103	Initial calibration and alignment of low-cost inertial navigation units for land vehicle applications. Journal of Field Robotics, 1999, 16, 81-92.	0.7	81
104	Initial calibration and alignment of lowâ€cost inertial navigation units for land vehicle applications. Journal of Field Robotics, 1999, 16, 81-92.	0.7	57
105	Robust Autonomous Navigation and World Representation in Outdoor Environments. , 0, , .		2
106	Implementation of Simultaneous Navigation and Mapping in Large Outdoor Environments. , 0, , 37-48.		6