Kai O Arras

List of Publications by Year
in descending order

42 papers	2,890 citations	759233 12 h-index	996975 15 g-index
44 all docs	44 docs citations	44 times ranked	2092 citing authors

#	Article	IF	Citations
1	Human motion trajectory prediction: a survey. International Journal of Robotics Research, 2020, 39, 895-935.	8.5	381
2	People detection in RGB-D data. , 2011, , .		254
3	Using Boosted Features for the Detection of People in 2D Range Data. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	235
4	People tracking with human motion predictions from social forces. , 2010, , .		199
5	Robox at Expo.02: A large-scale installation of personal robots. Robotics and Autonomous Systems, 2003, 42, 203-222.	5.1	194
6	Socially-aware robot navigation: A learning approach. , 2012, , .		117
7	Inverse Reinforcement Learning algorithms and features for robot navigation in crowds: An experimental comparison. , 2014, , .		112
8	Efficient people tracking in laser range data using a multi-hypothesis leg-tracker with adaptive occlusion probabilities. , 2008, , .		110
9	Multisensor on-the-fly localization:. Robotics and Autonomous Systems, 2001, 34, 131-143.	5.1	103
10	Place-dependent people tracking. International Journal of Robotics Research, 2011, 30, 280-293.	8.5	92
11	FLIRT - Interest regions for 2D range data. , 2010, , .		90
12	<title>Feature extraction and scene interpretation for map-based navigation and map building</title>. , 1998, , .		85
13	RRT-based nonholonomic motion planning using any-angle path biasing. , 2016, , .		79
14	Tracking people in 3D using a bottom-up top-down detector. , 2011, , .		76
15	On multi-modal people tracking from mobile platforms in very crowded and dynamic environments. , 2016, , .		76
16	Learning socially normative robot navigation behaviors with Bayesian inverse reinforcement learning. , 2016, , .		70
17	Feature-based multi-hypothesis localization and tracking using geometric constraints. Robotics and Autonomous Systems, 2003, 44, 41-53.	5.1	56
18	Multi-model Hypothesis Group Tracking and Group Size Estimation. International Journal of Social Robotics, 2010, 2, 19-30.	4.6	56

#	Article	IF	Citations
19	A novel RRT extend function for efficient and smooth mobile robot motion planning. , 2014, , .		47
20	Robot-specific social cues in emotional body language. , 2012, , .		46
21	Joint Long-Term Prediction of Human Motion Using a Planning-Based Social Force Approach. , 2018, , .		35
22	Distance metric learning for RRT-based motion planning with constant-time inference. , 2015, , .		30
23	Leveraging RGB-D Data: Adaptive fusion and domain adaptation for object detection. , 2012, , .		25
24	Kinodynamic motion planning on Gaussian mixture fields. , 2017, , .		25
25	Tracking groups of people with a multi-model hypothesis tracker. , 2009, , .		24
26	Gradient-Informed Path Smoothing for Wheeled Mobile Robots. , 2018, , .		24
27	Bench-MR: A Motion Planning Benchmark for Wheeled Mobile Robots. IEEE Robotics and Automation Letters, 2021, 6, 4536-4543.	5.1	23
28	R2-D2 Reloaded: A flexible sound synthesis system for sonic human-robot interaction design. , 2014, , .		22
29	Deep Person Detection in Two-Dimensional Range Data. IEEE Robotics and Automation Letters, 2018, 3, 2726-2733.	5.1	21
30	Range-Based People Detection and Tracking for Socially Enabled Service Robots. Springer Tracts in Advanced Robotics, 2012, , 235-280.	0.4	21
31	People detection in RGB-D Data. , 2011, , .		21
32	Human Motion Prediction Under Social Grouping Constraints. , 2018, , .		18
33	An NMPC Approach using Convex Inner Approximations for Online Motion Planning with Guaranteed Collision Avoidance. , 2020, , .		18
34	Real-time full-body human gender recognition in (RGB)-D data. , 2015, , .		17
35	Classifying dynamic objects. Autonomous Robots, 2009, 26, 141-151.	4.8	16
36	Dispertio: Optimal Sampling For Safe Deterministic Motion Planning. IEEE Robotics and Automation Letters, 2020, 5, 362-368.	5.1	13

#	Article	IF	Citations
37	CIAOâŽ: MPC-based Safe Motion Planning in Predictable Dynamic Environments. IFAC-PapersOnLine, 2020, 53, 6555-6562.	0.9	13
38	Better models for people tracking. , 2011, , .		9
39	Real-time full-body human attribute classification in RGB-D using a tessellation boosting approach. , 2015, , .		9
40	Learning Occupancy Priors of Human Motion From Semantic Maps of Urban Environments. IEEE Robotics and Automation Letters, 2021, 6, 3248-3255.	5.1	5
41	Robox, a Remarkable Mobile Robot for the Real World. , 2003, , 178-187.		5
42	Cross-Modal Analysis of Human Detection for Robotics: An Industrial Case Study. , 2021, , .		2