Anthony Stentz

List of Publications by Year
in descending order

58 papers	**3,160** citations	257450 **24** h-index	454955 **30** g-index
62 all docs	**62** docs citations	**62** times ranked	**2360** citing authors

#	Article	IF	Citations
1	Developing a Robust Disaster Response Robot: CHIMPÂand the Robotics Challenge. Journal of Field Robotics, 2017, 34, 281-304.	6.0	28
2	Leader tracking for a walking logistics robot. , 2015, , .		19
3	CHIMP, the CMU Highly Intelligent Mobile Platform. Journal of Field Robotics, 2015, 32, 209-228.	6.0	105
4	Scene understanding for a high-mobility walking robot. , 2015, , .		11
5	Perceiving, learning, and exploiting object affordances for autonomous pile manipulation. Autonomous Robots, 2014, 37, 369-382.	4.8	51
6	A comprehensive taxonomy for multi-robot task allocation. International Journal of Robotics Research, 2013, 32, 1495-1512.	8.5	407
7	Clearing a pile of unknown objects using interactive perception. , 2013, , .		21
8	Imitation learning for natural language direction following through unknown environments. , 2013, , .		29
9	Learning Autonomous Driving Styles and Maneuvers from Expert Demonstration. Springer Tracts in Advanced Robotics, 2013, , 371-386.	0.4	24
10	Anytime policy planning in large dynamic environments with interactive uncertainty. , 2012, , .		4
11	xBots: An approach to generating and executing optimal multi-robot plans with cross-schedule dependencies. , 2012, , .		33
12	Market-based coordination of coupled robot systems. , 2011, , .		2
13	Time-extended multi-robot coordination for domains withÂintra-path constraints. Autonomous Robots, 2011, 30, 41-56.	4.8	75
14	Anytime online novelty and change detection for mobile robots. Journal of Field Robotics, 2011, 28, 589-618.	6.0	33
15	An efficient algorithm for environmental coverage with multiple robots. , 2011, , .		5
16	Monte Carlo Localization and registration to prior data for outdoor navigation. , 2011, , .		4
17	Segmentation-based online change detection for mobile robots. , 2011, , .		11
18	MARE: Marine Autonomous Robotic Explorer. , 2011, , .		0

#	Article	IF	Citations
19	Learning for Autonomous Navigation. IEEE Robotics and Automation Magazine, 2010, 17, 74-84.	2.0	59
20	A Multi-Modal System For Yield Prediction in Citrus Trees. , 2010, , .		2
21	Imitation learning for task allocation. , 2010, , .		14
22	Learning from Demonstration for Autonomous Navigation in Complex Unstructured Terrain. International Journal of Robotics Research, 2010, 29, 1565-1592.	8.5	93
23	A new approach to vision-aided inertial navigation. , 2010, , .		71
24	Vision-aided inertial navigation for power line inspection. , 2010, , .		2
25	Anytime online novelty detection for vehicle safeguarding. , 2010, , .		9
26	Applied Imitation Learning for Autonomous Navigation in Complex Natural Terrain. Springer Tracts in Advanced Robotics, 2010, , 249-259.	0.4	9
27	Bandit-Based Online Candidate Selection for Adjustable Autonomy. Springer Tracts in Advanced Robotics, 2010, , 239-248.	0.4	1
28	Global planning on the Mars Exploration Rovers: Software integration and surface testing. Journal of Field Robotics, 2009, 26, 337-357.	6.0	53
29	Replanning with uncertainty in position: Sensor updates vs. prior map updates. , 2008, , .		2
30	Blended local planning for generating safe and feasible paths. , 2008, , .		0
31	Information value-driven approach to path clearance with multiple scout robots. , 2008, , .		1
32	Learning-enhanced market-based task allocation for oversubscribed domains. , 2007, , .		28
33	Goal directed navigation with uncertainty in adversary locations. , 2007, , .		8
34	Planning with Uncertainty in Position Using High-Resolution Maps. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	24
35	Global Path Planning on Board the Mars Exploration Rovers. , 2007, , .		83
36	Anytime, Dynamic Planning in High-dimensional Search Spaces. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	45

#	Article	IF	Citations
37	Field D*: An Interpolation-Based Path Planner and Replanner. , 2007, , 239-253.		114
38	Anytime RRTs. , 2006, , .		168
39	Mission-level path planning and re-planning for rover exploration. Robotics and Autonomous Systems, 2006, 54, 174-183.	5.1	40
40	Using interpolation to improve path planning: The Field D* algorithm. Journal of Field Robotics, 2006, 23, 79-101.	6.0	296
41	Improving robot navigation through self-supervised online learning. Journal of Field Robotics, 2006, 23, 1059-1075.	6.0	75
42	A Generative Model of Terrain for Autonomous Navigation in Vegetation. International Journal of Robotics Research, 2006, 25, 1287-1304.	8.5	64
43	Experimental Analysis of Overhead Data Processing To Support Long Range Navigation. , 2006, , .		29
44	MARKET-BASED COMPLEX TASK ALLOCATION FOR MULTIROBOT TEAMS. , 2006, , .		18
45	Autonomous Driving with Concurrent Goals and Multiple Vehicles: Experiments and Mobility Components. Autonomous Robots, 2002, 12, 135-156.	4.8	5
46	The Demeter System for Automated Harvesting. Autonomous Robots, 2002, 13, 9-20.	4.8	87
47	A System for Semi-Autonomous Tractor Operations. Autonomous Robots, 2002, 13, 87-104.	4.8	106
48	Autonomous Driving with Concurrent Goals and Multiple Vehicles: Mission Planning and Architecture. Autonomous Robots, 2001, 11, 103-115.	4.8	12
49	An efficient on-line path planner for outdoor mobile robots. Robotics and Autonomous Systems, 2000, 32, 129-143.	5.1	61
50	A Robotic Excavator for Autonomous Truck Loading. Autonomous Robots, 1999, 7, 175-186.	4.8	134
51	Rough Terrain Autonomous Mobility—Part 1: A Theoretical Analysis of Requirements. Autonomous Robots, 1998, 5, 129-161.	4.8	48
52	Rough Terrain Autonomous Mobility—Part 2: An Active Vision, Predictive Control Approach. Autonomous Robots, 1998, 5, 163-198.	4.8	86
53	Dynamic Mission Planning for Multiple Mobile Robots. , 1997, , 221-234.		38
54	A mobile robot iconic position estimator using a radial laser scanner. Journal of Intelligent and Robotic Systems: Theory and Applications, 1995, 13, 161-179.	3.4	31

#	Article	IF	Citations
55	A complete navigation system for goal acquisition in unknown environments. Autonomous Robots, 1995, 2, 127-145.	4.8	116
56	<title>Autonomous system for cross-country navigation</title>. , 1993, 1831, 540.		2
57	Mobile Robot Navigation: The CMU System. IEEE Intelligent Systems, 1987, 2, 44-54.	1.0	46
58	Perceiving, Learning, and Exploiting Object Affordances for Autonomous Pile Manipulation. , 0, , .		21