Erhan Oztop

List of Publications by Year
in descending order

73 papers	2,275 citations	393982 19 h-index	329751 37 g-index
81 all docs	81 docs citations	81 times ranked	1742 citing authors

#	Article	IF	Citations
1	Imitation and mirror systems in robots through Deep Modality Blending Networks. Neural Networks, 2022, 146, 22-35.	3.3	10
2	High-level features for resource economy and fast learning in skill transfer. Advanced Robotics, 2022, 36, 291-303.	1.1	2
3	Combined weight and density bounds on the polynomial threshold function representation of Boolean functions. Discrete Mathematics, 2022, 345, 112912.	0.4	1
4	Emotion as an emergent phenomenon of the neurocomputational energy regulation mechanism of a cognitive agent in a decision-making task. Adaptive Behavior, 2021, 29, 55-71.	1.1	11
5	Effect Regulated Projection of Robot's Action Space for Production and Prediction of Manipulation Primitives Through Learning Progress and Predictability-Based Exploration. IEEE Transactions on Cognitive and Developmental Systems, 2021, 13, 286-297.	2.6	3
6	Guest Editorial Special Issue on Continual Unsupervised Sensorimotor Learning. IEEE Transactions on Cognitive and Developmental Systems, 2021, 13, 234-238.	2.6	0
7	Modeling robot trust based on emergent emotion in an interactive task. , 2021, , .		10
8	Trust me! I am a robot: an affective computational account of scaffolding in robot-robot interaction. , 2021, , .		8
9	An Ecologically Valid Reference Frame for Perspective Invariant Action Recognition. , 2021, , .		0
10	Inferring Cost Functions Using Reward Parameter Search and Policy Gradient Reinforcement Learning. , 2021, , .		1
11	Lifelong Robot Learning. , 2021, , 1-12.		0
12	High-level representations through unconstrained sensorimotor learning. , 2020, , .		2
13	Adaptive Inverse Kinematics of a 9-DOF Surgical Robot for Effective Manipulation. , 2019, , .		1
14	Human Adaptation to Human–Robot Shared Control. IEEE Transactions on Human-Machine Systems, 2019, 49, 126-136.	2.5	25
15	Affordance-based altruistic robotic architecture for human–robot collaboration. Adaptive Behavior, 2019, 27, 223-241.	1.1	7
16	Force Reference Extraction via Human Interaction for a Robotic Polishing Task: Force-Induced Motion. , 2019, , .		4
17	Symbol Emergence in Cognitive Developmental Systems: A Survey. IEEE Transactions on Cognitive and Developmental Systems, 2019, 11, 494-516.	2.6	53
18	Effective Robot Skill Synthesis via Divided Control. , 2018, , .		0

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19	Modeling the Development of Infant Imitation using Inverse Reinforcement Learning. , 2018, , .		0
20	Human-In-The-Loop Control and Task Learning for Pneumatically Actuated Muscle Based Robots. Frontiers in Neurorobotics, 2018, 12, 71.	1.6	13
21	Cognition-Enabled Robot Manipulation in Human Environments: Requirements, Recent Work, and Open Problems. IEEE Robotics and Automation Magazine, 2017, 24, 108-122.	2.2	37
22	Algorithms for Obtaining Parsimonious Higher Order Neurons. Lecture Notes in Computer Science, 2017, , 146-154.	1.0	0
23	On the Co-absence of Input Terms in Higher Order Neuron Representation of Boolean Functions. Lecture Notes in Computer Science, 2017, , 362-370.	1.0	0
24	Sequential decision making based on emergent emotion for a humanoid robot. , 2016, , .		10
25	A shared control method for online human-in-the-loop robot learning based on Locally Weighted Regression. , 2016, , .		20
26	Synergistic human-robot shared control via human goal estimation. , 2016, , .		4
27	Human motor adaptation in whole body motion. Scientific Reports, 2016, 6, 32868.	1.6	17
28	Neural representation in F5: cross-decoding from observation to execution. BMC Neuroscience, 2015, 16, .	0.8	1
29	Cooperative multi-task assignment for heterogonous UAVs. , 2015, , .		7
30	Environmental force estimation for a robotic hand: Compliant contact detection. , 2015, , .		2
31	Parental scaffolding as a bootstrapping mechanism for learning grasp affordances and imitation skills. Robotica, 2015, 33, 1163-1180.	1.3	21
32	Staged Development of Robot Skills: Behavior Formation, Affordance Learning and Imitation with Motionese. IEEE Transactions on Autonomous Mental Development, 2015, 7, 119-139.	2.3	63
33	Simultaneous human-robot adaptation for effective skill transfer. , 2015, , .		4
34	Minimal Sign Representation of Boolean Functions: Algorithms and Exact Results for Low Dimensions. Neural Computation, 2015, 27, 1796-1823.	1.3	6
35	Teaching robots to cooperate with humans in dynamic manipulation tasks based on multi-modal human-in-the-loop approach. Autonomous Robots, 2014, 36, 123-136.	3.2	114
36	Action and Language Mechanisms in the Brain: Data, Models and Neuroinformatics. Neuroinformatics, 2014, 12, 209-225.	1.5	7

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37	Humanoid Brain Science. Frontiers in Neuroengineering Series, 2014, , 29-46.	0.4	0
38	Mirror neurons: Functions, mechanisms and models. Neuroscience Letters, 2013, 540, 43-55.	1.0	129
39	Emergent emotion via neural computational energy conservation on a humanoid robot. , 2013, , .		6
40	Reinforcement learning to adjust parametrized motor primitives to new situations. Autonomous Robots, 2012, 33, 361-379.	3.2	128
41	Self-discovery of motor primitives and learning grasp affordances. , 2012, , .		24
42	A kernel-based approach to direct action perception. , 2012, , .		47
43	Robotic grasping and manipulation through human visuomotor learning. Robotics and Autonomous Systems, 2012, 60, 441-451.	3.0	12
44	Model free head pose estimation using stereovision. Pattern Recognition, 2012, 45, 33-42.	5.1	18
45	Learning to grasp with parental scaffolding. , 2011, , .		10
46	Goal emulation and planning in perceptual space using learned affordances. Robotics and Autonomous Systems, 2011, 59, 580-595.	3.0	73
47	Unsupervised learning of object affordances for planning in a mobile manipulation platform. , 2011, , .		13
48	Going beyond the perception of affordances: Learning how to actualize them through behavioral parameters. , 2011, , .		12
49	Structured unsupervised kernel regression for closed-loop motion control. , 2010, , .		5
50	Inverse Kinematics of Humanoid-Robot Reaching through Human Visuo-Motor Learning. , 2010, , 341-348.		0
51	Sign-representation of Boolean functions using a small number of monomials. Neural Networks, 2009, 22, 938-948.	3.3	7
52	Predicting future object states using learned affordances. , 2009, , .		5
53	Improving balance regulation in visuo-motor control for humanoid robots. , 2009, , .		0
54	From self-observation to imitation: Visuomotor association on a robotic hand. Brain Research Bulletin, 2008, 75, 775-784.	1.4	42

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55	Task dependent human-like grasping. , 2008, , .		1
56	From Biologically Realistic Imitation to Robot Teaching Via Human Motor Learning. Lecture Notes in Computer Science, 2008, , 214-221.	1.0	2
57	Exploiting similarities for robot perception. , 2007, , .		3
58	Extensive Human Training for Robot Skill Synthesis: Validation on a Robotic Hand. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	9
59	Unconstrained Real-time Markerless Hand Tracking for Humanoid Interaction. , 2006, , .		28
60	Learning feature representations for an object recognition system. , 2006, , .		7
61	The development of grasping and the mirror system. , 2006, , 397-423.		6
62	Mirror neurons and imitation: A computationally guided review. Neural Networks, 2006, 19, 254-271.	3.3	254
63	A computational model of anterior intraparietal (AIP) neurons. Neurocomputing, 2006, 69, 1354-1361.	3.5	20
64	An Upper Bound on the Minimum Number of Monomials Required to Separate Dichotomies of $\{-1, 1\}n$. Neural Computation, 2006, 18, 3119-3138.	1.3	9
65	Dexterous Skills Transfer by Extending Human Body Schema to a Robotic Hand. , 2006, , .		21
66	Mental state inference using visual control parameters. Cognitive Brain Research, 2005, 22, 129-151.	3.3	185
67	Conceptual and Computational Models of Mirror Neurons. The Brain & Neural Networks, 2005, 12, 61-73.	0.1	0
68	HUMAN–HUMANOID INTERACTION: IS A HUMANOID ROBOT PERCEIVED AS A HUMAN?. International Journal of Humanoid Robotics, 2005, 02, 537-559.	0.6	101
69	Infant grasp learning: a computational model. Experimental Brain Research, 2004, 158, 480-503.	0.7	100
70	Schema design and implementation of the grasp-related mirror neuron system. Biological Cybernetics, 2002, 87, 116-140.	0.6	255
71	Synthetic brain imaging: grasping, mirror neurons and imitation. Neural Networks, 2000, 13, 975-997.	3.3	227
72	Repulsive attractive network for baseline extraction on document images. Signal Processing, 1999, 75, 1-10.	2.1	26

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73	Models for the control of grasping. , 0, , 110-124.		1