Randall C O'reilly

List of Publications by Year in descending order

97 papers	19,496 citations	30070 54 h-index	46799 89 g-index
118 all docs	118 docs citations	118 times ranked	12818 citing authors

#	Article	IF	Citations
1	The Structure of Systematicity in the Brain. Current Directions in Psychological Science, 2022, 31, 124-130.	5.3	11
2	The Neural Correlates of Cued Reward Omission. Frontiers in Human Neuroscience, 2021, 15, 615313.	2.0	8
3	Deep Predictive Learning in Neocortex and Pulvinar. Journal of Cognitive Neuroscience, 2021, 33, 1158-1196.	2.3	19
4	Effects of retrieval practice on tested and untested information: Cortico-hippocampal interactions and error-driven learning. Psychology of Learning and Motivation - Advances in Research and Theory, 2021, , 125-155.	1.1	4
5	Complementary Structure-Learning Neural Networks for Relational Reasoning. , 2021, 2021, 1560-1566.		2
6	How Sequential Interactive Processing Within Frontostriatal Loops Supports a Continuum of Habitual to Controlled Processing. Frontiers in Psychology, 2020, 11, 380.	2.1	7
7	Unraveling the Mysteries of Motivation. Trends in Cognitive Sciences, 2020, 24, 425-434.	7.8	23
8	A systems-neuroscience model of phasic dopamine.. Psychological Review, 2020, 127, 972-1021.	3.8	14
9	Computational models of motivated frontal function. Handbook of Clinical Neurology / Edited By P J Vinken and G W Bruyn, 2019, 163, 317-332.	1.8	3
10	Prediction error and somatosensory insula activation in women recovered from anorexia nervosa. Journal of Psychiatry and Neuroscience, 2016, 41, 304-311.	2.4	36
11	Regional specialization within the human striatum for diverse psychological functions. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 1907-1912.	7.1	188
12	How the credit assignment problems in motor control could be solved after the cerebellum predicts increases in error. Frontiers in Computational Neuroscience, 2015, 9, 39.	2.1	5
13	The Leabra Cognitive Architecture. , 2015, , .		7
14	Latent structure in random sequences drives neural learning toward a rational bias. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 3788-3792.	7.1	12
15	Reply to Aksentijevic: It is a matter of what is countable and how neurons learn. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E3160-E3160.	7.1	0
16	Thalamic pathways underlying prefrontal cortexâ€"medial temporal lobe oscillatory interactions. Trends in Neurosciences, 2015, 38, 3-12.	8.6	101
17	Early recurrent feedback facilitates visual object recognition under challenging conditions. Frontiers in Psychology, 2014, 5, 674.	2.1	83
18	A model of proactive and reactive cognitive control with anterior cingulate cortex and the neuromodulatory system. Biologically Inspired Cognitive Architectures, 2014, 10, 61-67.	0.9	1

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19	Complementary Learning Systems. Cognitive Science, 2014, 38, 1229-1248.	1.7	161
20	Integrating theories of motor sequencing in the SAL hybrid architecture. Biologically Inspired Cognitive Architectures, 2014, 8, 100-108.	0.9	1
21	A continuous-time neural model for sequential action. Philosophical Transactions of the Royal Society B: Biological Sciences, 2014, 369, 20130623.	4.0	15
22	A neural network model of individual differences in task switching abilities. Neuropsychologia, 2014, 62, 375-389.	1.6	96
23	How Limited Systematicity Emerges. , 2014, , 191-226.		8
24	Indirection and symbol-like processing in the prefrontal cortex and basal ganglia. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 16390-16395.	7.1	99
25	Individual Differences in Cognitive Flexibility. Biological Psychiatry, 2013, 74, 78-79.	1.3	3
26	Strategic Cognitive Sequencing: A Computational Cognitive Neuroscience Approach. Computational Intelligence and Neuroscience, 2013, 2013, 1-18.	1.7	14
27	Assembling Old Tricks for New Tasks: A Neural Model of Instructional Learning and Control. Journal of Cognitive Neuroscience, 2013, 25, 843-851.	2.3	20
28	Theta Coordinated Error-Driven Learning in the Hippocampus. PLoS Computational Biology, 2013, 9, e1003067.	3.2	53
29	Recurrent Processing during Object Recognition. Frontiers in Psychology, 2013, 4, 124.	2.1	106
30	Expectancy, Ambiguity, and Behavioral Flexibility: Separable and Complementary Roles of the Orbital Frontal Cortex and Amygdala in Processing Reward Expectancies. Journal of Cognitive Neuroscience, 2012, 24, 351-366.	2.3	25
31	Anorexia Nervosa and Obesity are Associated with Opposite Brain Reward Response. Neuropsychopharmacology, 2012, 37, 2031-2046.	5.4	269
32	The Limits of Feedforward Vision: Recurrent Processing Promotes Robust Object Recognition when Objects Are Degraded. Journal of Cognitive Neuroscience, 2012, 24, 2248-2261.	2.3	110
33	Distinct contributions of the caudate nucleus, rostral prefrontal cortex, and parietal cortex to the execution of instructed tasks. Cognitive, Affective and Behavioral Neuroscience, 2012, 12, 611-628.	2.0	49
34	The Function and Organization of Lateral Prefrontal Cortex: A Test of Competing Hypotheses. PLoS ONE, 2012, 7, e30284.	2.5	62
35	The Role of Competitive Inhibition and Top-Down Feedback in Binding during Object Recognition. Frontiers in Psychology, 2012, 3, 182.	2.1	19
36	Inhibiting PKMÎ¶ reveals dorsal lateral and dorsal medial striatum store the different memories needed to support adaptive behavior. Learning and Memory, 2012, 19, 307-314.	1.3	43

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37	Altered Temporal Difference Learning in Bulimia Nervosa. Biological Psychiatry, 2011, 70, 728-735.	1.3	103
38	A unified framework for inhibitory control. Trends in Cognitive Sciences, 2011, 15, 453-459.	7.8	489
39	The Leabra architecture: Specialization without modularity. Behavioral and Brain Sciences, 2010, 33, 286-287.	0.7	5
40	Computational models of cognitive control. Current Opinion in Neurobiology, 2010, 20, 257-261.	4.2	79
41	Neural mechanisms of acquired phasic dopamine responses in learning. Neuroscience and Biobehavioral Reviews, 2010, 34, 701-720.	6.1	87
42	Neural inhibition enables selection during language processing. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 16483-16488.	7.1	78
43	The What and How of prefrontal cortical organization. Trends in Neurosciences, 2010, 33, 355-361.	8.6	229
44	Developing PFC representations using reinforcement learning. Cognition, 2009, 113, 281-292.	2.2	53
45	Attentional control of associative learningâ€"A possible role of the central cholinergic system. Brain Research, 2008, 1202, 43-53.	2.2	39
46	Midazolam, hippocampal function, and transitive inference: Reply to Greene. Behavioral and Brain Functions, 2008, 4, 5.	3.3	7
47	The role of the dorsal striatum and dorsal hippocampus in probabilistic and deterministic odor discrimination tasks. Learning and Memory, 2008, 15, 294-298.	1.3	10
48	SAL: an explicitly pluralistic cognitive architecture. Journal of Experimental and Theoretical Artificial Intelligence, 2008, 20, 197-218.	2.8	108
49	Beyond red states and blue states in cognitive science. Journal of Experimental and Theoretical Artificial Intelligence, 2008, 20, 265-268.	2.8	1
50	The dynamics of integration and separation: ERP, MEG, and neural network studies of immediate repetition effects.. Journal of Experimental Psychology: Human Perception and Performance, 2008, 34, 1389-1416.	0.9	33
51	Developmental and Computational Approaches to Variation in Working Memory. , 2008, , 162-193.		3
52	Towards an executive without a homunculus: computational models of the prefrontal cortex/basal ganglia system. Philosophical Transactions of the Royal Society B: Biological Sciences, 2007, 362, 1601-1613.	4.0	355
53	PVLV: The Primary Value and Learned Value Pavlovian Learning Algorithm.. Behavioral Neuroscience, 2007, 121, 31-49.	1.2	103
54	Testing Computational Models of Dopamine and Noradrenaline Dysfunction in Attention Deficit/Hyperactivity Disorder. Neuropsychopharmacology, 2007, 32, 1583-1599.	5.4	200

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55	Separate neural substrates for skill learning and performance in the ventral and dorsal striatum. Nature Neuroscience, 2007, 10, 126-131.	14.8	222
56	A mechanistic account of striatal dopamine function in human cognition: Psychopharmacological studies with cabergoline and haloperidol.. Behavioral Neuroscience, 2006, 120, 497-517.	1.2	411
57	Making Working Memory Work: A Computational Model of Learning in the Prefrontal Cortex and Basal Ganglia. Neural Computation, 2006, 18, 283-328.	2.2	839
58	Neural Mechanisms of Cognitive Control: An Integrative Model of Stroop Task Performance and fMRI Data. Journal of Cognitive Neuroscience, 2006, 18, 22-32.	2.3	117
59	Biologically Based Computational Models of High-Level Cognition. Science, 2006, 314, 91-94.	12.6	395
60	When Memory Fails, Intuition Reigns. Psychological Science, 2006, 17, 700-707.	3.3	133
61	When logic fails: Implicit transitive inference in humans. Memory and Cognition, 2005, 33, 742-750.	1.6	100
62	Prefrontal cortex and the organization of recent and remote memories: An alternative view. Learning and Memory, 2005, 12, 445-446.	1.3	58
63	Prefrontal cortex and flexible cognitive control: Rules without symbols. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 7338-7343.	7.1	367
64	Serial visual search from a parallel model. Vision Research, 2005, 45, 2987-2992.	1.4	12
65	By Carrot or by Stick: Cognitive Reinforcement Learning in Parkinsonism. Science, 2004, 306, 1940-1943.	12.6	1,734
66	Hippocampus, cortex, and basal ganglia: Insights from computational models of complementary learning systems. Neurobiology of Learning and Memory, 2004, 82, 253-267.	1.9	165
67	Persistence and accommodation in short-term priming and other perceptual paradigms: temporal segregation through synaptic depression. Cognitive Science, 2003, 27, 403-430.	1.7	77
68	Transitivity, flexibility, conjunctive representations, and the hippocampus. I. An empirical analysis. Hippocampus, 2003, 13, 334-340.	1.9	118
69	Transitivity, flexibility, conjunctive representations, and the hippocampus. II. A computational analysis. Hippocampus, 2003, 13, 341-354.	1.9	136
70	Modeling hippocampal and neocortical contributions to recognition memory: A complementary-learning-systems approach.. Psychological Review, 2003, 110, 611-646.	3.8	1,091
71	Persistence and accommodation in short-term priming and other perceptual paradigms: temporal segregation through synaptic depression. Cognitive Science, 2003, 27, 403-430.	1.7	13
72	Prefrontal Cortex and Dynamic Categorization Tasks: Representational Organization and Neuromodulatory Control. Cerebral Cortex, 2002, 12, 246-257.	2.9	197

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73	Hippocampal formation supports conditioning to memory of a context.. Behavioral Neuroscience, 2002, 116, 530-538.	1.2	227
74	Hippocampal and neocortical contributions to memory: advances in the complementary learning systems framework. Trends in Cognitive Sciences, 2002, 6, 505-510.	7.8	382
75	Memory for context is impaired by injecting anisomycin into dorsal hippocampus following context exploration. Behavioural Brain Research, 2002, 134, 299-306.	2.2	118
76	Learning representations in a gated prefrontal cortex model of dynamic task switching. Cognitive Science, 2002, 26, 503-520.	1.7	41
77	Learning representations in a gated prefrontal cortex model of dynamic task switching. Cognitive Science, 2002, 26, 503-520.	1.7	11
78	Hippocampal formation supports conditioning to memory of a context.. Behavioral Neuroscience, 2002, 116, 530-538.	1.2	130
79	Conjunctive representations in learning and memory: Principles of cortical and hippocampal function.. Psychological Review, 2001, 108, 311-345.	3.8	786
80	Visual Representation in the Wild: How Rhesus Monkeys Parse Objects. Journal of Cognitive Neuroscience, 2001, 13, 44-58.	2.3	55
81	Generalization in Interactive Networks: The Benefits of Inhibitory Competition and Hebbian Learning. Neural Computation, 2001, 13, 1199-1241.	2.2	92
82	Graded effects in hierarchical figure-ground organization: Reply to Peterson (1999).. Journal of Experimental Psychology: Human Perception and Performance, 2000, 26, 1221-1231.	0.9	22
83	Computational principles of learning in the neocortex and hippocampus. Hippocampus, 2000, 10, 389-397.	1.9	159
84	SIMULATION AND EXPLANATION IN NEUROPSYCHOLOGY AND BEYOND. Cognitive Neuropsychology, 1999, 16, 49-72.	1.1	59
85	Contextual fear conditioning, conjunctive representations, pattern completion, and the hippocampus.. Behavioral Neuroscience, 1999, 113, 867-880.	1.2	240
86	A Biologically Based Computational Model of Working Memory. , 1999, , 375-411.		170
87	Contextual fear conditioning, conjunctive representations, pattern completion, and the hippocampus.. Behavioral Neuroscience, 1999, 113, 867-880.	1.2	130
88	Six principles for biologically based computational models of cortical cognition. Trends in Cognitive Sciences, 1998, 2, 455-462.	7.8	274
89	Figure-ground organization and object recognition processes: An interactive account.. Journal of Experimental Psychology: Human Perception and Performance, 1998, 24, 441-462.	0.9	97
90	Figure-ground organization and object recognition processes: An interactive account.. Journal of Experimental Psychology: Human Perception and Performance, 1998, 24, 441-462.	0.9	77

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91	Biologically Plausible Error-Driven Learning Using Local Activation Differences: The Generalized Recirculation Algorithm. Neural Computation, 1996, 8, 895-938.	2.2	298
92	Why there are complementary learning systems in the hippocampus and neocortex: Insights from the successes and failures of connectionist models of learning and memory.. Psychological Review, 1995, 102, 419-457.	3.8	4,586
93	Object Recognition and Sensitive Periods: A Computational Analysis of Visual Imprinting. Neural Computation, 1994, 6, 357-389.	2.2	82
94	Hippocampal conjunctive encoding, storage, and recall: Avoiding a trade-off. Hippocampus, 1994, 4, 661-682.	1.9	819
95	Dissociated overt and covert recognition as an emergent property of a lesioned neural network.. Psychological Review, 1993, 100, 571-588.	3.8	339
96	Receptive Field Characteristics That Allow Parietal Lobe Neurons to Encode Spatial Properties of Visual Input: A Computational Analysis. Journal of Cognitive Neuroscience, 1990, 2, 141-155.	2.3	22
97	Object Recognition and Sensitive Periods: A Computational Analysis of Visual Imprinting. , 0, , 392-413.		0