Thomas G Dietterich

List of Publications by Year
in descending order

40	5,299	394421	377865
papers	citations	19 h-index	34 g-index

42	42	42	5879
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Approximate Statistical Tests for Comparing Supervised Classification Learning Algorithms. Neural Computation, 1998, 10, 1895-1923.	2.2	2,651
2	The eBird enterprise: An integrated approach to development and application of citizen science. Biological Conservation, 2014, 169, 31-40.	4.1	703
3	A Unifying Review of Deep and Shallow Anomaly Detection. Proceedings of the IEEE, 2021, 109, 756-795.	21.3	375
4	A model of the mechanical design process based on empirical data. Artificial Intelligence for Engineering Design, Analysis and Manufacturing: AIEDAM, 1988, 2, 33-52.	1.1	208
5	An experimental comparison of the nearest-neighbor and nearest-hyperrectangle algorithms. Machine Learning, 1995, 19, 5-27.	5.4	180
6	A Study of Explanation-Based Methods for Inductive Learning. Machine Learning, 1989, 4, 187-226.	5.4	123
7	Learning at the Knowledge Level. Machine Learning, 1986, 1, 287-315.	5.4	113
8	Automated insect identification through concatenated histograms of local appearance features: feature vector generation and region detection for deformable objects. Machine Vision and Applications, 2008, 19, 105-123.	2.7	105
9	Map Misclassification Can Cause Large Errors in Landscape Pattern Indices: Examples from Habitat Fragmentation. Ecosystems, 2006, 9, 474-488.	3.4	93
10	Structured machine learning: the next ten years. Machine Learning, 2008, 73, 3-23.	5.4	90
11	Systematic construction of anomaly detection benchmarks from real data. , 2013, , .		80
12	Allowing a wildfire to burn: estimating the effect on future fire suppression costs. International Journal of Wildland Fire, 2013, 22, 871.	2.4	63
13	Rise of concerns about AI. Communications of the ACM, 2015, 58, 38-40.	4.5	62
14	Automated processing and identification of benthic invertebrate samples. Journal of the North American Benthological Society, 2010, 29, 867-874.	3.1	55
15	Computational sustainability. Communications of the ACM, 2019, 62, 56-65.	4.5	49
16	Explanation-Based Learning and Reinforcement Learning: A Unified View. Machine Learning, 1997, 28, 169-210.	5.4	43
17	Feedback-Guided Anomaly Discovery via Online Optimization. , 2018, , .		38
18	Penalized likelihood methods improve parameter estimates in occupancy models. Methods in Ecology and Evolution, 2015, 6, 949-959.	5.2	26

#	Article	IF	Citations
19	Sequential Feature Explanations for Anomaly Detection. ACM Transactions on Knowledge Discovery From Data, 2019, 13, 1-22.	3.5	26
20	A data representation for collaborative mechanical design. Research in Engineering Design - Theory, Applications, and Concurrent Engineering, 1992, 3, 233-242.	2.1	23
21	Segmentation of touching insects based on optical flow and NCuts. Biosystems Engineering, 2013, 114, 67-77.	4.3	21
22	Spatial interactions and optimal forest management on a fire-threatened landscape. Forest Policy and Economics, 2017, 83, 107-120.	3.4	20
23	Editorial Exploratory research in machine learning. Machine Learning, 1990, 5, 5-9.	5.4	19
24	Learning first-order probabilistic models with combining rules. Annals of Mathematics and Artificial Intelligence, 2008, 54, 223-256.	1.3	19
25	Robust artificial intelligence and robust human organizations. Frontiers of Computer Science, 2019, 13, 1-3.	2.4	18
26	Reconstructing Velocities of Migrating Birds from Weather Radar â€“ A Case Study in Computational Sustainability. AI Magazine, 2014, 35, 31-48.	1.6	14
27	Crowds Replicate Performance of Scientific Experts Scoring Phylogenetic Matrices of Phenotypes. Systematic Biology, 2018, 67, 49-60.	5.6	8
28	The Role of Restoration and Key Ecological Invasion Mechanisms in Optimal Spatial-Dynamic Management of Invasive Species. Ecological Economics, 2018, 151, 44-54.	5.7	8
29	Automatic Discovery and Transfer of Task Hierarchies in Reinforcement Learning. AI Magazine, 2011, 32, 35.	1.6	7
30	Interactive visualization for testing Markov Decision Processes: MDPVIS. Journal of Visual Languages and Computing, 2017, 39, 93-106.	1.8	7
31	Facilitating testing and debugging of Markov Decision Processes with interactive visualization. , 2015, , .		6
32	Managing Fragmented Fire-Threatened Landscapes with Spatial Externalities. Forest Science, 2020, 66, 443-456.	1.0	6
33	Discovering Anomalies by Incorporating Feedback from an Expert. ACM Transactions on Knowledge Discovery From Data, 2020, 14, 1-32.	3.5	6
34	Machine learning for computational sustainability. , 2012, , .		5
35	Optimal Spatial-Dynamic Management of Stochastic Species Invasions. Environmental and Resource Economics, 2018, 70, 403-427.	3.2	4
36	Evaluating wildland fire liability standards â€“ does regulation incentivise good management?. International Journal of Wildland Fire, 2020, 29, 572.	2.4	3

#	Article	IF	Citations
37	Who speaks for AI?. AI Matters, 2016, 2, 4-14.	0.4	1
38	DARPAâ€™s Role in Machine Learning. AI Magazine, 2020, 41, 36-48.	1.6	1
39	Induction: Weak but essential. Behavioral and Brain Sciences, 1986, 9, 654-655.	0.7	0
40	A family of large margin linear classifiers and its application in dynamic environments. Statistical Analysis and Data Mining, 2009, 2, 328-345.	2.8	0