Thomas G Dietterich

List of Publications by Year
in descending order

40 papers	5,299 citations	394421 19 h-index	377865 34 g-index
42 all docs	42 docs citations	42 times ranked	5879 citing authors

#	Article	IF	Citations
1	A Unifying Review of Deep and Shallow Anomaly Detection. Proceedings of the IEEE, 2021, 109, 756-795.	21.3	375
2	Managing Fragmented Fire-Threatened Landscapes with Spatial Externalities. Forest Science, 2020, 66, 443-456.	1.0	6
3	Evaluating wildland fire liability standards â€" does regulation incentivise good management?. International Journal of Wildland Fire, 2020, 29, 572.	2.4	3
4	DARPAâ€™s Role in Machine Learning. AI Magazine, 2020, 41, 36-48.	1.6	1
5	Discovering Anomalies by Incorporating Feedback from an Expert. ACM Transactions on Knowledge Discovery From Data, 2020, 14, 1-32.	3.5	6
6	Computational sustainability. Communications of the ACM, 2019, 62, 56-65.	4.5	49
7	Sequential Feature Explanations for Anomaly Detection. ACM Transactions on Knowledge Discovery From Data, 2019, 13, 1-22.	3.5	26
8	Robust artificial intelligence and robust human organizations. Frontiers of Computer Science, 2019, 13, 1-3.	2.4	18
9	Optimal Spatial-Dynamic Management of Stochastic Species Invasions. Environmental and Resource Economics, 2018, 70, 403-427.	3.2	4
10	Crowds Replicate Performance of Scientific Experts Scoring Phylogenetic Matrices of Phenotypes. Systematic Biology, 2018, 67, 49-60.	5.6	8
11	Feedback-Guided Anomaly Discovery via Online Optimization. , 2018, , .		38
12	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
13	Spatial interactions and optimal forest management on a fire-threatened landscape. Forest Policy and Economics, 2017, 83, 107-120.	3.4	20
14	Interactive visualization for testing Markov Decision Processes: MDPVIS. Journal of Visual Languages and Computing, 2017, 39, 93-106.	1.8	7
15	Who speaks for AI?. AI Matters, 2016, 2, 4-14.	0.4	1
16	Facilitating testing and debugging of Markov Decision Processes with interactive visualization. , 2015, , .		6
17	Penalized likelihood methods improve parameter estimates in occupancy models. Methods in Ecology and Evolution, 2015, 6, 949-959.	5.2	26
18	Rise of concerns about AI. Communications of the ACM, 2015, 58, 38-40.	4.5	62

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19	Reconstructing Velocities of Migrating Birds from Weather Radar â€“ A Case Study in Computational Sustainability. AI Magazine, 2014, 35, 31-48.	1.6	14
20	The eBird enterprise: An integrated approach to development and application of citizen science. Biological Conservation, 2014, 169, 31-40.	4.1	703
21	Segmentation of touching insects based on optical flow and NCuts. Biosystems Engineering, 2013, 114, 67-77.	4.3	21
22	Systematic construction of anomaly detection benchmarks from real data. , 2013, , .		80
23	Allowing a wildfire to burn: estimating the effect on future fire suppression costs. International Journal of Wildland Fire, 2013, 22, 871.	2.4	63
24	Machine learning for computational sustainability. , 2012, , .		5
25	Automatic Discovery and Transfer of Task Hierarchies in Reinforcement Learning. AI Magazine, 2011, 32, 35.	1.6	7
26	Automated processing and identification of benthic invertebrate samples. Journal of the North American Benthological Society, 2010, 29, 867-874.	3.1	55
27	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
28	Structured machine learning: the next ten years. Machine Learning, 2008, 73, 3-23.	5.4	90
29	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
30	Learning first-order probabilistic models with combining rules. Annals of Mathematics and Artificial Intelligence, 2008, 54, 223-256.	1.3	19
31	Map Misclassification Can Cause Large Errors in Landscape Pattern Indices: Examples from Habitat Fragmentation. Ecosystems, 2006, 9, 474-488.	3.4	93
32	Approximate Statistical Tests for Comparing Supervised Classification Learning Algorithms. Neural Computation, 1998, 10, 1895-1923.	2.2	2,651
33	Explanation-Based Learning and Reinforcement Learning: A Unified View. Machine Learning, 1997, 28, 169-210.	5.4	43
34	An experimental comparison of the nearest-neighbor and nearest-hyperrectangle algorithms. Machine Learning, 1995, 19, 5-27.	5.4	180
35	A data representation for collaborative mechanical design. Research in Engineering Design - Theory, Applications, and Concurrent Engineering, 1992, 3, 233-242.	2.1	23
36	Editorial Exploratory research in machine learning. Machine Learning, 1990, 5, 5-9.	5.4	19

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37	A Study of Explanation-Based Methods for Inductive Learning. Machine Learning, 1989, 4, 187-226.	5.4	123
38	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
39	Learning at the Knowledge Level. Machine Learning, 1986, 1, 287-315.	5.4	113
40	Induction: Weak but essential. Behavioral and Brain Sciences, 1986, 9, 654-655.	0.7	0