Trevor Hastie

List of Publications by Citations

87 papers	76,636 citations	62 h-index	95 g-index
95 ext. papers	91,628 ext. citations	5.9 avg, IF	8.34 L-index

#	Paper	IF	Citations
87	The Elements of Statistical Learning. *Springer Series in Statistics*, **2009**,	0.3	9918
86	Regularization and variable selection via the elastic net. *Journal of the Royal Statistical Society Series B: Statistical Methodology*, **2005**, 67, 301-320	3.9	8544
85	Regularization Paths for Generalized Linear Models via Coordinate Descent. *Journal of Statistical Software*, **2010**, 33,	7.3	6603
84	The Elements of Statistical Learning. *Springer Series in Statistics*, **2001**,	0.3	6424
83	Least angle regression. *Annals of Statistics*, **2004**, 32, 407	3.2	5029
82	Repeated observation of breast tumor subtypes in independent gene expression data sets. *Proceedings of the National Academy of Sciences of the United States of America*, **2003**, 100, 8418-23	11.5	4262
81	Regularization Paths for Generalized Linear Models via Coordinate Descent. *Journal of Statistical Software*, **2010**, 33, 1-22	7.3	3855
80	Additive logistic regression: a statistical view of boosting (With discussion and a rejoinder by the authors). *Annals of Statistics*, **2000**, 28, 337	3.2	3535
79	A statistical explanation of MaxEnt for ecologists. *Diversity and Distributions*, **2011**, 17, 43-57	5	3194
78	Sparse inverse covariance estimation with the graphical lasso. *Biostatistics*, **2008**, 9, 432-41	3.7	2705
77	Diagnosis of multiple cancer types by shrunken centroids of gene expression. *Proceedings of the National Academy of Sciences of the United States of America*, **2002**, 99, 6567-72	11.5	2252
76	Generalized Additive Models. *Statistical Science*, **1986**, 1, 297	2.4	1531
75	Sparse Principal Component Analysis. *Journal of Computational and Graphical Statistics*, **2006**, 15, 265-286	2.4	1510
74	Generalized linear and generalized additive models in studies of species distributions: setting the scene. *Ecological Modelling*, **2002**, 157, 89-100	3	1332
73	Pathwise coordinate optimization. *Annals of Applied Statistics*, **2007**, 1,	2.1	1022
72	A penalized matrix decomposition, with applications to sparse principal components and canonical correlation analysis. *Biostatistics*, **2009**, 10, 515-34	3.7	839
71	Regularization Paths for Cox's Proportional Hazards Model via Coordinate Descent. *Journal of Statistical Software*, **2011**, 39, 1-13	7.3	826

70	Robustness, scalability, and integration of a wound-response gene expression signature in predicting breast cancer survival. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 3738-43	11.5	823
69	Principal Curves. *Journal of the American Statistical Association*, **1989**, 84, 502-516	2.8	818
68	Classification by pairwise coupling. *Annals of Statistics*, **1998**, 26, 451	3.2	640
67	A Sparse-Group Lasso. *Journal of Computational and Graphical Statistics*, **2013**, 22, 231-245	1.4	618
66	Linear Smoothers and Additive Models. *Annals of Statistics*, **1989**, 17, 453	3.2	559
65	Genome-wide association analysis by lasso penalized logistic regression. *Bioinformatics*, **2009**, 25, 714-21	7.2	504
64	On the degrees of freedom of the lasso. *Annals of Statistics*, **2007**, 35, 2173	3.2	500
63	Penalized Discriminant Analysis. *Annals of Statistics*, **1995**, 23, 73	3.2	490
62	Gene expression programs in response to hypoxia: cell type specificity and prognostic significance in human cancers. *PLoS Medicine*, **2006**, 3, e47	11.6	476
61	L1-regularization path algorithm for generalized linear models. *Journal of the Royal Statistical Society Series B: Statistical Methodology*, **2007**, 69, 659-677	3.9	457
60	Prediction by Supervised Principal Components. *Journal of the American Statistical Association*, **2006**, 101, 119-137	2.8	415
59	Flexible Discriminant Analysis by Optimal Scoring. *Journal of the American Statistical Association*, **1994**, 89, 1255-1270	2.8	392
58	Regularized linear discriminant analysis and its application in microarrays. *Biostatistics*, **2007**, 8, 86-100	3.7	370
57	Generalized Additive Models: Some Applications. *Journal of the American Statistical Association*, **1987**, 82, 371-386	2.8	365
56	Making better biogeographical predictions of species distributions. *Journal of Applied Ecology*, **2006**, 43, 386-392	5.8	359
55	Sparse Discriminant Analysis. *Technometrics*, **2011**, 53, 406-413	1.4	337
54	Local Likelihood Estimation. *Journal of the American Statistical Association*, **1987**, 82, 559-567	2.8	276
53	Gene expression patterns in ovarian carcinomas. *Molecular Biology of the Cell*, **2003**, 14, 4376-86	3.5	273

52	Penalized logistic regression for detecting gene interactions. *Biostatistics*, **2008**, 9, 30-50	3.7	261
51	Varying-Coefficient Models. *Journal of the Royal Statistical Society Series B: Methodological*, **1993**, 55, 757-779		255
50	Strong rules for discarding predictors in lasso-type problems. *Journal of the Royal Statistical Society Series B: Statistical Methodology*, **2012**, 74, 245-266	3.9	254
49	Class Prediction by Nearest Shrunken Centroids, with Applications to DNA Microarrays. *Statistical Science*, **2003**, 18, 104	2.4	252
48	The Geometric Interpretation of Correspondence Analysis. *Journal of the American Statistical Association*, **1987**, 82, 437-447	2.8	242
47	Bias correction in species distribution models: pooling survey and collection data for multiple species. *Methods in Ecology and Evolution*, **2015**, 6, 424-438	7.7	225
46	: Coordinate Descent With Nonconvex Penalties. *Journal of the American Statistical Association*, **2011**, 106, 1125-1138	2.8	218
45	Point process models for presence-only analysis. *Methods in Ecology and Evolution*, **2015**, 6, 366-379	7.7	211
44	Presence-only data and the em algorithm. *Biometrics*, **2009**, 65, 554-63	1.8	161
43	Inference from presence-only data; the ongoing controversy. *Ecography*, **2013**, 36, 864-867	6.5	139
42	Novel methods for the design and evaluation of marine protected areas in offshore waters. *Conservation Letters*, **2008**, 1, 91-102	6.9	133
41	Finite-Sample Equivalence in Statistical Models for Presence-Only Data. *Annals of Applied Statistics*, **2013**, 7, 1917-1939	2.1	132
40	The graphical lasso: New insights and alternatives. *Electronic Journal of Statistics*, **2012**, 6, 2125-2149	1.2	124
39	Flexible Discriminant Analysis by Optimal Scoring		122
38	Supervised harvesting of expression trees. *Genome Biology*, **2001**, 2, RESEARCH0003	18.3	113
37	Discriminant Analysis by Gaussian Mixtures. *Journal of the Royal Statistical Society Series B: Methodological*, **1996**, 58, 155-176		103
36	Learning interactions via hierarchical group-lasso regularization. *Journal of Computational and Graphical Statistics*, **2015**, 24, 627-654	1.4	102
35	Averaged gene expressions for regression. *Biostatistics*, **2007**, 8, 212-27	3.7	101

34	Local Likelihood Estimation		91
33	CAUSAL INTERPRETATIONS OF BLACK-BOX MODELS. *Journal of Business and Economic Statistics*, **2019**, 2019,	3.8	87
32	Genetics of 35 blood and urine biomarkers in the UK Biobank. *Nature Genetics*, **2021**, 53, 185-194	36.3	78
31	Bayesian backfitting (with comments and a rejoinder by the authors. *Statistical Science*, **2000**, 15, 196	2.4	74
30	Principal Curves and Surfaces **1984**,		74
29	Classification of gene microarrays by penalized logistic regression. *Biostatistics*, **2004**, 5, 427-43	3.7	66
28	Radiation-induced gene expression in human subcutaneous fibroblasts is predictive of radiation-induced fibrosis. *Radiotherapy and Oncology*, **2008**, 86, 314-20	5.3	65
27	Characterization of heterotypic interaction effects in vitro to deconvolute global gene expression profiles in cancer. *Genome Biology*, **2007**, 8, R191	18.3	65
26	Preconditioning for feature selection and regression in high-dimensional problems. *Annals of Statistics*, **2008**, 36,	3.2	64
25	Exact Covariance Thresholding into Connected Components for Large-Scale Graphical Lasso. *Journal of Machine Learning Research*, **2012**, 13, 781-794	28.6	59
24	Generalized Additive Models: Some Applications		59
23	NEW MULTICATEGORY BOOSTING ALGORITHMS BASED ON MULTICATEGORY FISHER-CONSISTENT LOSSES. *Annals of Applied Statistics*, **2008**, 2, 1290-1306	2.1	54
22	The Geometric Interpretation of Correspondence Analysis		53
21	Metrics and models for handwritten character recognition. *Statistical Science*, **1998**, 13, 54	2.4	52
20	Gene expression programs of human smooth muscle cells: tissue-specific differentiation and prognostic significance in breast cancers. *PLoS Genetics*, **2007**, 3, 1770-84	6	48
19	ZeitZeiger: supervised learning for high-dimensional data from an oscillatory system. *Nucleic Acids Research*, **2016**, 44, e80	20.1	47
18	Risk estimation of distant metastasis in node-negative, estrogen receptor-positive breast cancer patients using an RT-PCR based prognostic expression signature. *BMC Cancer*, **2008**, 8, 339	4.8	43
17	LOCAL CASE-CONTROL SAMPLING: EFFICIENT SUBSAMPLING IN IMBALANCED DATA SETS. *Annals of Statistics*, **2014**, 42, 1693-1724	3.2	41

16	A fused lasso latent feature model for analyzing multi-sample aCGH data. *Biostatistics*, **2011**, 12, 776-91	3.7	38
15	An inflammatory aging clock (iAge) based on deep learning tracks multimorbidity, immunosenescence, frailty and cardiovascular aging. *Nature Aging*, **2021**, 1, 598-615		36
14	Wearable sensors enable personalized predictions of clinical laboratory measurements. *Nature Medicine*, **2021**, 27, 1105-1112	50.5	30
13	3-D curve matching using splines. *Journal of Field Robotics*, **1991**, 8, 723-743		27
12	A fast and scalable framework for large-scale and ultrahigh-dimensional sparse regression with application to the UK Biobank. *PLoS Genetics*, **2020**, 16, e1009141	6	22
11	Generalized Additive Models **2014**,		21
10	Combining biological gene expression signatures in predicting outcome in breast cancer: An alternative to supervised classification. *European Journal of Cancer*, **2008**, 44, 2319-29	7.5	18
9	Best Subset, Forward Stepwise or Lasso? Analysis and Recommendations Based on Extensive Comparisons. *Statistical Science*, **2020**, 35,	2.4	16
8	Rejoinder: Linear Smoothers and Additive Models. *Annals of Statistics*, **1989**, 17, 543	3.2	11
7	Sparse EEG/MEG source estimation via a group lasso. *PLoS ONE*, **2017**, 12, e0176835	3.7	7
6	Discussion: Projection Pursuit. *Annals of Statistics*, **1985**, 13, 502	3.2	7
5	Fast Lasso method for large-scale and ultrahigh-dimensional Cox model with applications to UK Biobank. *Biostatistics*, **2020**,	3.7	7
4	Support Vector Machines, Kernel Logistic Regression and Boosting. *Lecture Notes in Computer Science*, **2002**, 16-26	0.9	6
3	Metrics and Models for Handwritten Character Recognition **1997**, 203-219		4
2	Nuclear penalized multinomial regression with an application to predicting at bat outcomes in baseball. *Statistical Modelling*, **2018**, 18, 388-410	0.7	4
1	Significant sparse polygenic risk scores across 813 traits in UK Biobank.. *PLoS Genetics*, **2022**, 18, e1010105	3.5	0