Theodore B Trafalis

List of Publications by Year
in descending order

76	1,156	471061 17	433756 31
papers	citations	h-index	g-index

80	80	80	1034
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A hybrid model for exchange rate prediction. Decision Support Systems, 2006, 42, 1054-1062.	3.5	109
2	Robust weighted kernel logistic regression in imbalanced and rare events data. Computational Statistics and Data Analysis, 2011, 55, 168-183.	0.7	102
3	Robust classification and regression using support vector machines. European Journal of Operational Research, 2006, 173, 893-909.	3.5	100
4	Deep MLP-CNN Model Using Mixed-Data to Distinguish between COVID-19 and Non-COVID-19 Patients. Symmetry, 2020, 12, 1526.	1.1	77
5	Short term forecasting with support vector machines and application to stock price prediction. International Journal of General Systems, 2008, 37, 677-687.	1.2	73
6	Two-Phase Flow Regime Identification with a Multiclassification Support Vector Machine (SVM) Model. Industrial & Engineering Chemistry Research, 2005, 44, 4414-4426.	1.8	72
7	Kernel principal component analysis and support vector machines for stock price prediction. IIE Transactions, 2007, 39, 629-637.	2.1	54
8	Real-time prediction of order flowtimes using support vector regression. Computers and Operations Research, 2008, 35, 3489-3503.	2.4	49
9	Data mining techniques for improved WSR-88D rainfall estimation. Computers and Industrial Engineering, 2002, 43, 775-786.	3.4	32
10	A novel metaheuristics approach for continuous global optimization. Journal of Global Optimization, 2002, 23, 171-190.	1.1	27
11	Logistic regression in large rare events and imbalanced data: A performance comparison of prior correction and weighting methods. Computational Intelligence, 2018, 34, 161-174.	2.1	26
12	Support Vector Regression for Determination of Minimum Zone. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2003, 125, 736-739.	1.3	25
13	Support vector regression to predict asphalt mix performance. International Journal for Numerical and Analytical Methods in Geomechanics, 2008, 32, 1989-1996.	1.7	25
14	Kernel logistic regression using truncated Newton method. Computational Management Science, 2011, 8, 415-428.	0.8	23
15	From support vector machine learning to the determination of the minimum enclosing zone. Computers and Industrial Engineering, 2002, 42, 59-74.	3.4	22
16	Kernel methods for short-term portfolio management. Expert Systems With Applications, 2006, 30, 535-542.	4.4	22
17	Missing Data Imputation Through Machine Learning Algorithms. , 2009, , 153-169.		21
18	An Analytic Center Machine. Machine Learning, 2002, 46, 203-223.	3.4	19

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19	Support vector machines for spatiotemporal tornado prediction. International Journal of General Systems, 2009, 38, 759-776.	1.2	19
20	Machine-learning classifiers for imbalanced tornado data. Computational Management Science, 2014, 11, 403-418.	0.8	18
21	Active Learning with Support Vector Machines for Tornado Prediction. Lecture Notes in Computer Science, 2007, , 1130-1137.	1.0	18
22	Relevance Feedback in Content-based 3D Object Retrieval A Comparative Study. Computer-Aided Design and Applications, 2008, 5, 753-763.	0.4	17
23	Tornado Detection with Support Vector Machines. Lecture Notes in Computer Science, 2003, , 289-298.	1.0	16
24	Support vector regression with noisy data: a second order cone programming approach. International Journal of General Systems, 2007, 36, 237-250.	1.2	14
25	Support vector machine classification with noisy data: a second order cone programming approach. International Journal of General Systems, 2010, 39, 757-781.	1.2	14
26	Rare events and imbalanced datasets: an overview. International Journal of Data Mining, Modelling and Management, 2011, 3, 375.	0.1	12
27	Support vector regression for determining the minimum zone sphericity. International Journal of Advanced Manufacturing Technology, 2008, 35, 916-923.	1.5	11
28	A heuristic algorithm to solve the single-facility location routing problem on Riemannian surfaces. Computational Management Science, 2015, 12, 397-415.	0.8	8
29	Thyroid Nodule Benignty Prediction by Deep Feature Extraction. , 2017, , .		8
30	A regularized pairwise multi-classification knowledge-based machine and applications. European Journal of Operational Research, 2009, 195, 924-941.	3.5	7
31	Natural gas storage valuation via least squares Monte Carlo and support vector regression. Energy Systems, 2017, 8, 815-855.	1.8	7
32	Knowledge-Based Multiclass Support Vector Machines Applied to Vertical Two-Phase Flow. Lecture Notes in Computer Science, 2006, , 188-195.	1.0	7
33	Neural network training via an affine scaling quadratic optimization algorithm. Neural Networks, 1996, 9, 475-481.	3.3	5
34	Prediction of Rainfall from WSR-88D Radar Using Kernel-Based Methods. International Journal of Smart Engineering System Design, 2003, 5, 429-438.	0.2	5
35	Learning networks in rainfall estimation. Computational Management Science, 2005, 2, 229-251.	0.8	5
36	Single-phase fluid flow classification via learning models. International Journal of General Systems, 2011, 40, 561-576.	1.2	5

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37	Preface: Special volume on data mining and informatics. Annals of Operations Research, 2014, 216, 1-2.	2.6	5
38	Data selection using support vector regression. Advances in Atmospheric Sciences, 2015, 32, 277-286.	1.9	5
39	Data Mining Techniques for Pattern Recognition: Tornado Signatures in Doppler Weather Radar Data. International Journal of Smart Engineering System Design, 2003, 5, 347-359.	0.2	4
40	Mathematical Foundations for Form Inspection and Adaptive Sampling. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2009, 131, .	1.3	4
41	Quadratic programming formulations for classificationand regression. Optimization Methods and Software, 2009, 24, 175-185.	1.6	4
42	An interior point multiobjective programming approach for production planning with uncertain information. Computers and Industrial Engineering, 1999, 37, 631-648.	3.4	3
43	Robust multiclass kernel-based classifiers. Computational Optimization and Applications, 2007, 38, 261-279.	0.9	3
44	New kernel methods for asset pricing: application to natural gas price prediction. International Journal of Financial Markets and Derivatives, 2011, 2, 106.	0.2	3
45	On-line SVM learning via an incremental primalâ€“dual technique. Optimization Methods and Software, 2013, 28, 256-275.	1.6	3
46	Robust Supply Chain Network Design by Considering Demand-Side Uncertainty and Supply-Side Disruption. , 2013, , .		3
47	A Bayesian beta kernel model for binary classification and online learning problems. Statistical Analysis and Data Mining, 2014, 7, 434-449.	1.4	3
48	Constructing an Efficient Machine Learning Model for Tornado Prediction. SSRN Electronic Journal, 0, , .	0.4	3
49	2-Facility manifold location routing problem. Optimization Letters, 2017, 11, 389-405.	0.9	3
50	Interior Point Methods for Supervised Training of Artificial Neural Networks with Bounded Weights. Lecture Notes in Economics and Mathematical Systems, 1997, , 441-470.	0.3	3
51	A robust optimization approach in a multi-objective closed-loop supply chain model under imperfect quality production. Annals of Operations Research, 2022, 319, 1479-1505.	2.6	3
52	An interactive analytic center trade-off cutting plane algorithm for multiobjective linear programming. Computers and Industrial Engineering, 1999, 37, 649-669.	3.4	2
53	Learning networks for tornado detection. International Journal of General Systems, 2006, 35, 93-107.	1.2	2
54	Reinforcement Learning: An On-Line Framework Using Support Vectors. , 2007, , .		2

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55	An approximation to max min fairness in multi commodity networks. Computational Management Science, 2020, 17, 65-77.	0.8	2
56	Constructing an Efficient Machine Learning Model for Tornado Prediction. International Journal of Information Technology and Decision Making, 2020, 19, 1177-1187.	2.3	2
57	Imbalanced Learning with Parametric Linear Programming Support Vector Machine for Weather Data Application. SN Computer Science, 2020, 1, 1.	2.3	2
58	Kernel Logistic Regression Using Truncated Newton Method. , 0, , 455-462.		2
59	A Hybrid Scatter Genetic Tabu Approach for Continuous Global Optimization. Network Optimization Problems: Algorithms, Applications and Complexity, 2002, , 11-31.	0.1	2
60	A differential dynamic programming algorithm for differential games. Optimal Control Applications and Methods, 2001, 22, 17-36.	1.3	1
61	Mathematical framework for form inspection. International Journal of Advanced Manufacturing Technology, 2011, 52, 637-649.	1.5	1
62	Coordinate metrology for adaptive form verification. Manufacturing Letters, 2013, 1, 59-61.	1.1	1
63	An incremental primalâ€“dual method for nonlinear programming with special structure. Optimization Letters, 2013, 7, 51-62.	0.9	1
64	SVM Classification of Uncertain Data Using Robust Multi-Kernel Methods. Springer Proceedings in Mathematics and Statistics, 2015, , 261-273.	0.1	1
65	Detection of Tornados Using an Incremental Revised Support Vector Machine with Filters. Lecture Notes in Computer Science, 2006, , 506-513.	1.0	1
66	Deterministic and Stochastic Logarithmic Barrier Function Methods for Neural Network Training. Applied Optimization, 1997, , 529-574.	0.4	1
67	Differential Algebraic Equations in Primal Dual Interior Point Optimization Methods. AIP Conference Proceedings, 2004, , .	0.3	0
68	An Overview of Mean Field Theory in Combinatorial Optimization Problems. AIP Conference Proceedings, 2004, , .	0.3	0
69	Regularization Based Classification Models. Neural Networks (IJCNN), International Joint Conference on, 2007, , .	0.0	0
70	A nonlinear multi-classification knowledge-based kernel machine. Computational Management Science, 2009, 6, 81-100.	0.8	0
71	The p-Centre machine for regression analysis. Optimization Methods and Software, 2010, 25, 171-183.	1.6	0
72	Linear classification tikhonov regularization knowledge-based support vector machine for tornado forecasting. Computational Management Science, 2011, 8, 281-297.	0.8	0

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73	Time-series Analysis for Detecting Structure Changes and Suspicious Accounting Activities in Public Software Companies. Procedia Computer Science, 2013, 20, 466-471.	1.2	0
74	A Single-Facility Manifold Location Routing Problem with an Application to Supply Chain Management and Robotics. Lecture Notes in Computer Science, 2015, , 130-144.	1.0	0
75	Kernel classification using a linear programming approach. Annals of Mathematics and Artificial Intelligence, 2020, 88, 39-51.	0.9	0
76	Regularized Knowledge-Based Kernel Machine. Lecture Notes in Computer Science, 2007, , 176-183.	1.0	0