Nicolas Vayatis

List of Publications by Year
in descending order

58 papers	1,287 citations	567281 15 h-index	395702 33 g-index
62 all docs	62 docs citations	62 times ranked	1100 citing authors

#	Article	IF	Citations
1	Pandemic lockdown, isolation, and exit policies based on machine learning predictions. Production and Operations Management, 2023, 32, 1307-1322.	3.8	10
2	Preventing falls: the use of machine learning for the prediction of future falls in individuals without history of fall. Journal of Neurology, 2023, 270, 618-631.	3.6	15
3	An Uncertainty Principle for Lowband Graph Signals. IEEE Signal Processing Letters, 2022, 29, 727-731.	3.6	2
4	Quantitative assessment of consciousness during anesthesia without EEG data. Journal of Clinical Monitoring and Computing, 2021, 35, 993-1005.	1.6	3
5	Concentration inequalities for two-sample rank processes with application to bipartite ranking. Electronic Journal of Statistics, 2021, 15, .	0.7	0
6	Revealing posturographic profile of patients with Parkinsonian syndromes through a novel hypothesis testing framework based on machine learning. PLoS ONE, 2021, 16, e0246790.	2.5	8
7	Sleep apnea syndrome and subthalamic stimulation in Parkinson's disease. Sleep Medicine, 2021, 86, 106-112.	1.6	3
8	A review of center of pressure (COP) variables to quantify standing balance in elderly people: Algorithms and open‐access code*. Physiological Reports, 2021, 9, e15067.	1.7	79
9	Selective review of offline change point detection methods. Signal Processing, 2020, 167, 107299.	3.7	486
10	The Use of Inertial Measurement Units for the Study of Free Living Environment Activity Assessment: A Literature Review. Sensors, 2020, 20, 5625.	3.8	18
11	An opinion paper on the maintenance of robustness: Towards a multimodal and intergenerational approach using digital twins. Aging Medicine (Milton (N S W)), 2020, 3, 188-194.	2.1	4
12	Low Rank Activations for Tensor-Based Convolutional Sparse Coding. , 2020, , .		2
13	Hybrid Modelling for Lifetime Prediction. Lecture Notes in Mechanical Engineering, 2020, , 387-395.	0.4	0
14	Multivariate two-sample hypothesis testing through AUC maximization for biomedical applications. , 2020, , .		2
15	Supervised Kernel Change Point Detection with Partial Annotations. , 2019, , .		3
16	Selection of the Best Electroencephalogram Channel to Predict the Depth of Anesthesia. Frontiers in Computational Neuroscience, 2019, 13, 65.	2.1	2
17	Effects of bilateral stimulation of the subthalamic nucleus in Parkinson's disease with and without REM sleep behaviour disorder. Journal of Neurology, Neurosurgery and Psychiatry, 2019, 90, jnnp-2019-320858.	1.9	6
18	Balance Impairment in Radiation Induced Leukoencephalopathy Patients Is Coupled With Altered Visual Attention in Natural Tasks. Frontiers in Neurology, 2019, 9, 1185.	2.4	6

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19	The Complementary Role of Activity Context in the Mental Workload Evaluation of Helicopter Pilots: A Multi-tasking Learning Approach. Communications in Computer and Information Science, 2019, , 222-238.	0.5	5
20	Optimal Multiple Stopping Rule for Warm-Starting Sequential Selection. , 2019, , .		0
21	Sequential Dynamic Resource Allocation for Epidemic Control. , 2019, , .		0
22	Subsampling of Multivariate Time-Vertex Graph Signals. , 2019, , .		2
23	Greedy Kernel Change-Point Detection. IEEE Transactions on Signal Processing, 2019, 67, 6204-6214.	5.3	8
24	Template-Based Step Detection with Inertial Measurement Units. Sensors, 2018, 18, 4033.	3.8	23
25	Spectral bounds in random graphs applied to spreading phenomena and percolation. Advances in Applied Probability, 2018, 50, 480-503.	0.7	1
26	Information Diffusion and Rumor Spreading. , 2018, , 651-678.		2
27	On the importance of local dynamics in statokinesigram: A multivariate approach for postural control evaluation in elderly. PLoS ONE, 2018, 13, e0192868.	2.5	17
28	Fall detection using smart floor sensor and supervised learning. , 2017, 2017, 3445-3448.		15
29	Penalty learning for changepoint detection. , 2017, , .		8
30	A Non Linear Scoring Approach for Evaluating Balance: Classification of Elderly as Fallers and Non-Fallers. PLoS ONE, 2016, 11, e0167456.	2.5	26
31	Quantitative Analysis of Dynamic Fault Trees Based on the Coupling of Structure Functions and Monte Carlo Simulation. Quality and Reliability Engineering International, 2016, 32, 7-18.	2.3	28
32	Suppressing Epidemics in Networks Using Priority Planning. IEEE Transactions on Network Science and Engineering, 2016, 3, 271-285.	6.4	17
33	Prediction and optimization of wave energy converter arrays using a machine learning approach. Renewable Energy, 2016, 97, 504-517.	8.9	57
34	An Automated Recording Method in Clinical Consultation to Rate the Limp in Lower Limb Osteoarthritis. PLoS ONE, 2016, 11, e0164975.	2.5	23
35	A Machine Learning Approach to the Analysis of Wave Energy Converters. , 2015, , .		1
36	EpiBrainRad: an epidemiologic study of the neurotoxicity induced by radiotherapy in high grade glioma patients. BMC Neurology, 2015, 15, 261.	1.8	17

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37	A Greedy Approach for Dynamic Control of Diffusion Processes in Networks. , 2015, , .		5
38	Quality Quantification of Evaluated Cross Section Covariances. Nuclear Data Sheets, 2015, 123, 191-195.	2.2	1
39	A New Framework for the Simulation of Offshore Oil Facilities at the System Level. , 2015, , 45-57.		0
40	Applications of concentration inequalities for statistical scoring and ranking problems. ESAIM: Proceedings and Surveys, 2014, 44, 99-109.	0.4	0
41	Nonparametric Markovian Learning of Triggering Kernels for Mutually Exciting and Mutually Inhibiting Multivariate Hawkes Processes. Lecture Notes in Computer Science, 2014, , 161-176.	1.3	13
42	On the Simulation of Offshore Oil Facilities at the System Level.. , 2014, , .		1
43	Ranking data with ordinal labels: optimality and pairwise aggregation. Machine Learning, 2013, 91, 67-104.	5.4	16
44	An empirical comparison of learning algorithms for nonparametric scoring: the TreeRank algorithm and other methods. Pattern Analysis and Applications, 2013, 16, 475-496.	4.6	7
45	Parallel Gaussian Process Optimization with Upper Confidence Bound and Pure Exploration. Lecture Notes in Computer Science, 2013, , 225-240.	1.3	57
46	Adaptive partitioning schemes for bipartite ranking. Machine Learning, 2011, 83, 31-69.	5.4	13
47	Avancées récentes dans le domaine de l'apprentissage d'ordonnancements. Revue D'Intelligence Artificielle, 2011, 25, 345-368.	0.6	1
48	Strong Consistency of Bayesian Estimator Under Discrete Observations and Unknown Transition Density. , 2011, , 145-167.		0
49	Overlaying Classifiers: A Practical Approach to Optimal Scoring. Constructive Approximation, 2010, 32, 619-648.	3.0	16
50	Tree-Based Ranking Methods. IEEE Transactions on Information Theory, 2009, 55, 4316-4336.	2.4	36
51	Bagging Ranking Trees. , 2009, , .		5
52	Adaptive Estimation of the Optimal ROC Curve and a Bipartite Ranking Algorithm. Lecture Notes in Computer Science, 2009, , 216-231.	1.3	2
53	Ranking and Empirical Minimization of U-statistics. Annals of Statistics, 2008, 36, .	2.6	161
54	Ranking and Scoring Using Empirical Risk Minimization. Lecture Notes in Computer Science, 2005, , 1-15.	1.3	24

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55	A Data Set for the Study of Human Locomotion with Inertial Measurements Units. Image Processing on Line, 0, 9, 381-390.	0.0	10
56	SEAIR Framework Accounting for a Personalized Risk Prediction Score: Application to the Covid-19 Epidemic. Image Processing on Line, 0, 10, 150-166.	0.0	4
57	Local Assessment of Statokinesigram Dynamics in Time: An in-Depth Look at the Scoring Algorithm. Image Processing on Line, 0, 9, 143-157.	0.0	1
58	Epidemic Models for Personalised COVID-19 Isolation and Exit Policies Using Clinical Risk Predictions. SSRN Electronic Journal, 0, , .	0.4	4