Mykola Pechenizkiy

List of Publications by Year
in descending order

108 papers	5,177 citations	318942 23 h-index	182931 54 g-index
111 all docs	111 docs citations	111 times ranked	5070 citing authors

#	Article	IF	Citations
1	Analyzing and repairing concept drift adaptation in data stream classification. Machine Learning, 2022, 111, 3489-3523.	3.4	9
2	HM-EIICT: Fairness-aware link prediction in complex networks using community information. Journal of Combinatorial Optimization, 2022, 44, 2853-2870.	0.8	8
3	ResGCN: attention-based deep residual modeling for anomaly detection on attributed networks. Machine Learning, 2022, 111, 519-541.	3.4	16
4	Mining sequences with exceptional transition behaviour of varying order using quality measures based on information-theoretic scoring functions. Data Mining and Knowledge Discovery, 2022, 36, 379-413.	2.4	3
5	Sparse evolutionary deep learning with over one million artificial neurons on commodity hardware. Neural Computing and Applications, 2021, 33, 2589-2604.	3.2	21
6	Evolving Plasticity for Autonomous Learning under Changing Environmental Conditions. Evolutionary Computation, 2021, 29, 391-414.	2.3	5
7	Efficient and effective training of sparse recurrent neural networks. Neural Computing and Applications, 2021, 33, 9625-9636.	3.2	14
8	Recurring concept memory management in data streams: exploiting data stream concept evolution to improve performance and transparency. Data Mining and Knowledge Discovery, 2021, 35, 796-836.	2.4	6
9	How Fair is Fairness-aware Representative Ranking?. , 2021, , .		1
10	Introduction to The Special Section on Bias and Fairness in AI. SIGKDD Explorations: Newsletter of the Special Interest Group (SIG) on Knowledge Discovery & Data Mining, 2021, 23, 1-3.	3.2	2
11	SpaceNet: Make Free Space for Continual Learning. Neurocomputing, 2021, 439, 1-11.	3.5	17
12	Analyzing and Repairing Concept Drift Adaptation in Data Stream Classification. , 2021, , .		1
13	Controlling the accuracy and uncertainty trade-off in RUL prediction with a surrogate Wiener propagation model. Reliability Engineering and System Safety, 2020, 196, 106727.	5.1	31
14	Exceptional in so Many Waysâ€"Discovering Descriptors That Display Exceptional Behavior on Contrasting Scenarios. IEEE Access, 2020, 8, 200982-200994.	2.6	1
15	Bridging learning sciences, machine learning and affective computing for understanding cognition and affect in collaborative learning. British Journal of Educational Technology, 2020, 51, 2391-2406.	3.9	70
16	Ensuring cybersecurity of smart grid against data integrity attacks under concept drift. International Journal of Electrical Power and Energy Systems, 2020, 119, 105947.	3.3	57
17	struc2gauss: Structural role preserving network embedding via Gaussian embedding. Data Mining and Knowledge Discovery, 2020, 34, 1072-1103.	2.4	14
18	EEG-based classification of epilepsy and PNES: EEG microstate and functional brain network features. Brain Informatics, 2020, 7, 6.	1.8	40

#	Article	IF	Citations
19	Supervised Human-Guided Data Exploration. Communications in Computer and Information Science, 2020, , 85-101.	0.4	0
20	Novelty producing synaptic plasticity. , 2020, , .		1
21	Generation of False Data Injection Attacks using Conditional Generative Adversarial Networks. , 2020, , .		7
22	VANET Meets Deep Learning: The Effect of Packet Loss on the Object Detection Performance. , 2019, , .		15
23	Learning with delayed synaptic plasticity. , 2019, , .		4
24	Cluster-preserving sampling from fully-dynamic streaming graphs. Information Sciences, 2019, 482, 279-300.	4.0	6
25	Infinite motif stochastic blockmodel for role discovery in networks. , 2019, , .		2
26	Mining Context-Aware Association Rules Using Grammar-Based Genetic Programming. IEEE Transactions on Cybernetics, 2018, 48, 3030-3044.	6.2	29
27	Clustering-Structure Representative Sampling from Graph Streams. Studies in Computational Intelligence, 2018, , 265-277.	0.7	1
28	Apriori Versions Based on MapReduce for Mining Frequent Patterns on Big Data. IEEE Transactions on Cybernetics, 2018, 48, 2851-2865.	6.2	54
29	Limited evaluation cooperative co-evolutionary differential evolution for large-scale neuroevolution. , 2018, , .		10
30	Tink. , 2018, , .		8
31	A bounded-size clustering algorithm on fully-dynamic streaming graphs. Intelligent Data Analysis, 2018, 22, 1039-1058.	0.4	2
32	Twitter rumour detection in the health domain. Expert Systems With Applications, 2018, 110, 33-40.	4.4	67
33	Assessment of visibility graph similarity as a synchronization measure for chaotic, noisy and stochastic time series. Social Network Analysis and Mining, 2018, 8, 1.	1.9	9
34	Finding Predictive EEG Complexity Features for Classification of Epileptic and Psychogenic Nonepileptic Seizures Using Imperialist Competitive Algorithm. , 2018, , .		7
35	Multi-strategy Differential Evolution. Lecture Notes in Computer Science, 2018, , 617-633.	1.0	6
36	DyNMF: Role Analytics in Dynamic Social Networks. , 2018, , .		7

#	Article	IF	Citations
37	Expressive modeling for trusted big data analytics: techniques and applications in sentiment analysis. Big Data Analytics, 2017, 2, .	2.2	12
38	Towards Proximity Tracking and Sensemaking for Supporting Teamwork and Learning. , 2017, , .		6
39	A white-box anomaly-based framework for database leakage detection. Journal of Information Security and Applications, 2017, 32, 27-46.	1.8	24
40	Detection of Alcoholism Based on EEG Signals and Functional Brain Network Features Extraction. , 2017, , .		17
41	Health-related rumour detection on Twitter. , 2017, , .		8
42	Modelling Embodied Mobility Teamwork Strategies in a Simulation-Based Healthcare Classroom. , 2017, , .		5
43	BLPA: Bayesian learn-predict-adjust method for online detection of recurrent changepoints. , 2017, , .		3
44	Structural measures of clustering quality on graph samples. , 2016, , .		7
45	Mining exceptional relationships with grammar-guided genetic programming. Knowledge and Information Systems, 2016, 47, 571-594.	2.1	16
46	Application of Horizontal Visibility Graph as a Robust Measure of Neurophysiological Signals Synchrony. , 2016, , .		5
47	Modelling Recurrent Events for Improving Online Change Detection. , 2016, , .		2
48	A survey on using domain and contextual knowledge for human activity recognition in video streams. Expert Systems With Applications, 2016, 63, 97-111.	4.4	71
49	Speeding-Up Association Rule Mining With Inverted Index Compression. IEEE Transactions on Cybernetics, 2016, 46, 3059-3072.	6.2	33
50	An Overview of Concept Drift Applications. Studies in Big Data, 2016, , 91-114.	0.8	164
51	A robust density-based clustering algorithm for multi-manifold structure. , 2016, , .		5
52	On structure preserving sampling and approximate partitioning of graphs. , 2016, , .		5
53	DOBRO. , 2016, , .		0
54	The influence of dataset size on the performance of cell outage detection approach in LTE-A networks. , 2015, , .		4

#	Article	IF	Citations
55	Hippocrates: A Context-Aware, Collaboration Enabling Search Tool. , 2015, , .		0
56	Pattern-Based Emotion Classification on Social Media. Studies in Computational Intelligence, 2015, , 1-20.	0.7	10
57	A DSL based on CSS for hypertext adaptation. , 2014, , .		5
58	Towards the Stress Analytics Framework: Managing, Mining, and Visualizing Multi-modal Data for Stress Awareness. , 2014, , .		1
59	Dealing With Concept Drifts in Process Mining. IEEE Transactions on Neural Networks and Learning Systems, 2014, 25, 154-171.	7.2	134
60	A survey on concept drift adaptation. ACM Computing Surveys, 2014, 46, 1-37.	16.1	2,221
61	HyDR-MI: A hybrid algorithm to reduce dimensionality in multiple instance learning. Information Sciences, 2013, 222, 282-301.	4.0	19
62	Introduction to the special issue on handling concept drift in adaptive information systems. Evolving Systems, 2013, 4, 1-2.	2.4	2
63	A comparative study of dimensionality reduction techniques to enhance trace clustering performances. Expert Systems With Applications, 2013, 40, 3722-3737.	4.4	63
64	Predicting Current User Intent with Contextual Markov Models. , 2013, , .		14
65	Stress detection from speech and Galvanic Skin Response signals. , 2013, , .		135
66	ACLAC: An approach for adaptive closed-loop anesthesia control. , 2013, , .		3
67	RBEM. , 2013, , .		7
68	Cross-lingual polarity detection with machine translation. , 2013, , .		40
69	Predictive Handling of Asynchronous Concept Drifts in Distributed Environments. IEEE Transactions on Knowledge and Data Engineering, 2013, 25, 2343-2355.	4.0	26
70	Discovering temporal hidden contexts in web sessions for user trail prediction. , 2013, , .		10
71	Techniques for Discrimination-Free Predictive Models. Studies in Applied Philosophy, Epistemology and Rational Ethics, 2013, , 223-239.	0.2	13
72	Trends in computer-based medical systems. ACM SIGHIT Record, 2012, 2, 46-50.	0.5	0

#	Article	IF	Citations
73	Stess@Work. , 2012, , .		40
74	Introduction to the special section on educational data mining. SIGKDD Explorations: Newsletter of the Special Interest Group (SIG) on Knowledge Discovery & Data Mining, 2012, 13, 3-6.	3.2	43
75	Beating the baseline prediction in food sales: How intelligent an intelligent predictor is?. Expert Systems With Applications, 2012, 39, 806-815.	4.4	39
76	ReliefF-MI: An extension of ReliefF to multiple instance learning. Neurocomputing, 2012, 75, 210-218.	3.5	28
77	What's Your Current Stress Level? Detection of Stress Patterns from GSR Sensor Data. , 2011, , .		161
78	SentiCorr: Multilingual Sentiment Analysis of Personal Correspondence. , 2011, , .		23
79	Context-Aware Personal Route Recognition. Lecture Notes in Computer Science, 2011, , 221-235.	1.0	10
80	Knowledge discovery and computer-based decision support in biomedicine. Artificial Intelligence in Medicine, 2010, 50, 1-2.	3.8	4
81	Learning with Actionable Attributes: Attention -- Boundary Cases!. , 2010, , .		4
82	Provenance meets adaptive hypermedia. , 2010, , .		1
83	Adaptation and search. , 2010, , .		1
84	Handling concept drift in medical applications: Importance, challenges and solutions. , 2010, , .		8
85	Feature selection is the ReliefF for multiple instance learning. , 2010, , .		4
86	Discrimination Aware Decision Tree Learning. , 2010, , .		161
87	Online mass flow prediction in CFB boilers with explicit detection of sudden concept drift. SIGKDD Explorations: Newsletter of the Special Interest Group (SIG) on Knowledge Discovery & Data Mining, 2010, 11, 109-116.	3.2	28
88	Reducing Dimensionality in Multiple Instance Learning with a Filter Method. Lecture Notes in Computer Science, 2010, , 35-44.	1.0	4
89	From Local Patterns to Global Models: Towards Domain Driven Educational Process Mining. , 2009, , .		28
90	Dynamic and adaptive hypertext. , 2009, , .		1

#	Article	IF	Citations
91	Building Classifiers with Independency Constraints. , 2009, , .		188
92	AH 12 years later: a comprehensive survey of adaptive hypermedia methods and techniques. New Review of Hypermedia and Multimedia, 2009, 15, 5-38.	0.9	144
93	Towards Context Aware Food Sales Prediction. , 2009, , .		10
94	eHealth personalization in the next generation RPM systems. , 2009, , .		8
95	Dynamic integration of classifiers for handling concept drift. Information Fusion, 2008, 9, 56-68.	11.7	169
96	Food Sales Prediction: "If Only It Knew What We Know". , 2008, , .		9
97	Effectiveness of Local Feature Selection in Ensemble Learning for Prediction of Antimicrobial Resistance. , 2008, , .		1
98	Tailoring Feedback in Online Assessment: Influence of Learning Styles on the Feedback Preferences and Elaborated Feedback Effectiveness. , 2008, , .		14
99	Adaptation of Elaborated Feedback in e-Learning. Lecture Notes in Computer Science, 2008, , 235-244.	1.0	19
100	Defining Adaptation in a Generic Multi Layer Model: CAM: The GRAPPLE Conceptual Adaptation Model. Lecture Notes in Computer Science, 2008, , 132-143.	1.0	24
101	Personalization of Immediate Feedback to Learning Styles. , 2007, , .		4
102	Workshop on Educational Data Mining @ ICALT07 (EDM@ICALT07). , 2007, , .		1
103	Local Dimensionality Reduction and Supervised Learning Within Natural Clusters for Biomedical Data Analysis. IEEE Transactions on Information Technology in Biomedicine, 2006, 10, 533-539.	3.6	6
104	The impact of sample reduction on PCA-based feature extraction for supervised learning. , 2006, , .		15
105	Dynamic Integration with Random Forests. Lecture Notes in Computer Science, 2006, , 801-808.	1.0	43
106	Diversity in search strategies for ensemble feature selection. Information Fusion, 2005, 6, 83-98.	11.7	271
107	Knowledge Discovery from Microbiology Data: Many-Sided Analysis of Antibiotic Resistance in Nosocomial Infections. Lecture Notes in Computer Science, 2005, , 360-372.	1.0	6
108	Quick and robust feature selection: the strength of energy-efficient sparse training for autoencoders. Machine Learning, 0, , 1.	3.4	8