Szymon A Wilk

List of Publications by Year
in descending order

85 papers	1,337 citations	393982 19 h-index	377514 34 g-index
90 all docs	90 docs citations	90 times ranked	996 citing authors

#	Article	IF	Citations
1	Learning from Imbalanced Data in Presence of Noisy and Borderline Examples. Lecture Notes in Computer Science, 2010, , 158-167.	1.0	130
2	Selective Pre-processing of Imbalanced Data for Improving Classification Performance. Lecture Notes in Computer Science, 2008, , 283-292.	1.0	118
3	Mobile clinical support system for pediatric emergencies. Decision Support Systems, 2003, 36, 161-176.	3.5	68
4	Mitigation of adverse interactions in pairs of clinical practice guidelines using constraint logic programming. Journal of Biomedical Informatics, 2013, 46, 341-353.	2.5	58
5	Integrating Selective Pre-processing of Imbalanced Data with Ivotes Ensemble. Lecture Notes in Computer Science, 2010, , 148-157.	1.0	55
6	A Comparison of Two Approaches to Data Mining from Imbalanced Data. Journal of Intelligent Manufacturing, 2005, 16, 565-573.	4.4	50
7	Comprehensive mitigation framework for concurrent application of multiple clinical practice guidelines. Journal of Biomedical Informatics, 2017, 66, 52-71.	2.5	44
8	Supporting triage of children with abdominal pain in the emergency room. European Journal of Operational Research, 2005, 160, 696-709.	3.5	42
9	Design and Development of a Mobile System for Supporting Emergency Triage. Methods of Information in Medicine, 2005, 44, 14-24.	0.7	42
10	Comparing predictions made by a prediction model, clinical score, and physicians. Applied Clinical Informatics, 2013, 04, 376-391.	0.8	35
11	Implementing an Integrative Multi-agent Clinical Decision Support System with Open Source Software. Journal of Medical Systems, 2012, 36, 123-137.	2.2	33
12	A Tree-Based Decision Model to Support Prediction of the Severity of Asthma Exacerbations in Children. Journal of Medical Systems, 2010, 34, 551-562.	2.2	30
13	Clinical Decision Support System for Point of Care Use. Methods of Information in Medicine, 2009, 48, 381-390.	0.7	28
14	A Task-based Support Architecture for Developing Point-of-care Clinical Decision Support Systems for the Emergency Department. Methods of Information in Medicine, 2013, 52, 18-32.	0.7	27
15	On the joint-effect of class imbalance and overlap: a critical review. Artificial Intelligence Review, 2022, 55, 6207-6275.	9.7	27
16	Predicting the need for CT imaging in children with minor head injury using an ensemble of Naive Bayes classifiers. Artificial Intelligence in Medicine, 2012, 54, 163-170.	3.8	25
17	Ideating Mobile Health Behavioral Support for Compliance to Therapy for Patients with Chronic Disease: A Case Study of Atrial Fibrillation Management. Journal of Medical Systems, 2018, 42, 234.	2.2	23
18	Development of a Decision Algorithm to Support Emergency Triage of Scrotal Pain and its Implementation in the met system. Infor, 2005, 43, 287-301.	0.5	19

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19	Prospective evaluation of the MET-AP system providing triage plans for acute pediatric abdominal pain. International Journal of Medical Informatics, 2008, 77, 208-218.	1.6	18
20	Automatic indexing and retrieval of encounter-specific evidence for point-of-care support. Journal of Biomedical Informatics, 2010, 43, 623-631.	2.5	18
21	Difficulty Factors and Preprocessing in Imbalanced Data Sets: An Experimental Study on Artificial Data. Foundations of Computing and Decision Sciences, 2017, 42, 149-176.	0.5	18
22	Use Of Rough Sets Analysis To Classify Siberian Forest Ecosystems According To Net Primary Production Of Phytomass. Infor, 2000, 38, 145-160.	0.5	17
23	Evaluating business credit risk by means of approach-integrating decision rules and case-based learning. Intelligent Systems in Accounting, Finance and Management, 2001, 10, 97-114.	2.8	17
24	Using Semantic Components to Represent Dynamics of an Interdisciplinary Healthcare Team in a Multi-Agent Decision Support System. Journal of Medical Systems, 2016, 40, 42.	2.2	17
25	Using Constraint Logic Programming to Implement Iterative Actions and Numerical Measures during Mitigation of Concurrently Applied Clinical Practice Guidelines. Lecture Notes in Computer Science, 2013, , 17-22.	1.0	16
26	Triage of the child with abdominal pain: A clinical algorithm for emergency patient management. Paediatrics and Child Health, 2001, 6, 23-28.	0.3	15
27	A Comparison of Two Approaches to Data Mining from Imbalanced Data. Lecture Notes in Computer Science, 2004, , 757-763.	1.0	15
28	A review of AI and Data Science support for cancer management. Artificial Intelligence in Medicine, 2021, 117, 102111.	3.8	14
29	Designing man–machine interactions for mobile clinical systems: MET triage support using Palm handhelds. European Journal of Operational Research, 2007, 177, 1409-1417.	3.5	13
30	Identifying inconsistencies in multiple clinical practice guidelines for a patient with co-morbidity. , 2010, , .		13
31	Design and development of a mobile system for supporting emergency triage. Methods of Information in Medicine, 2005, 44, 14-24.	0.7	13
32	Benchmarking PySyft Federated Learning Framework on MIMIC-III Dataset. IEEE Access, 2021, 9, 116869-116878.	2.6	12
33	Application of Preprocessing Methods to Imbalanced Clinical Data: An Experimental Study. Advances in Intelligent Systems and Computing, 2016, , 503-515.	0.5	11
34	IIvotes ensemble for imbalanced data. Intelligent Data Analysis, 2012, 16, 777-801.	0.4	10
35	MitPlan: A planning approach to mitigating concurrently applied clinical practice guidelines. Artificial Intelligence in Medicine, 2021, 112, 102002.	3.8	10
36	Decision Making by Emergency Room Physicians and Residents. International Journal of Healthcare Information Systems and Informatics, 2009, 4, 17-35.	1.0	9

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37	Rough Set Methodology in Clinical Practice: Controlled Hospital Trial of the MET System. Lecture Notes in Computer Science, 2004, , 805-814.	1.0	9
38	Reconciliation of concurrently applied clinical practice guidelines using Constraint Logic Programming. , 2011, , .		8
39	Learning the Preferences of Physicians for the Organization of Result Lists of Medical Evidence Articles. Methods of Information in Medicine, 2014, 53, 344-356.	0.7	8
40	Extending Rule-Based Classifiers to Improve Recognition of Imbalanced Classes. Studies in Computational Intelligence, 2009, , 131-154.	0.7	8
41	An ontology-driven framework to support the dynamic formation of an interdisciplinary healthcare team. International Journal of Medical Informatics, 2020, 136, 104075.	1.6	7
42	Using First-Order Logic to Represent Clinical Practice Guidelines and to Mitigate Adverse Interactions. Lecture Notes in Computer Science, 2014, , 45-61.	1.0	7
43	Using a Bayesian belief network model to categorize length of stay for radical prostatectomy patients. Health Care Management Science, 2006, 9, 341-348.	1.5	6
44	Expanding usability analysis with intrinsic motivation concepts to learn about CDSS adoption: a case study. Health Policy and Technology, 2014, 3, 113-125.	1.3	6
45	Computer Tools to Analyze Lung CT Changes after Radiotherapy. Applied Sciences (Switzerland), 2021, 11, 1582.	1.3	6
46	A Health eLearning Ontology and Procedural Reasoning Approach for Developing Personalized Courses to Teach Patients about Their Medical Condition and Treatment. International Journal of Environmental Research and Public Health, 2021, 18, 7355.	1.2	6
47	An Algorithm for Selective Preprocessing of Multi-class Imbalanced Data. Advances in Intelligent Systems and Computing, 2018, , 238-247.	0.5	5
48	A Framework for Incorporating Patient Preferences to Deliver Participatory Medicine via Interdisciplinary Healthcare Teams. AMIA ... Annual Symposium proceedings, 2014, 2014, 835-44.	0.2	5
49	MET3-AE system to support management of pediatric asthma exacerbation in the emergency department. Studies in Health Technology and Informatics, 2010, 160, 841-5.	0.2	5
50	Catching Patient's Attention at the Right Time to Help Them Undergo Behavioural Change: Stress Classification Experiment from Blood Volume Pulse. Lecture Notes in Computer Science, 2021, , 72-82.	1.0	4
51	Mining Clinical Data: Selecting Decision Support Algorithm for the MET-AP System. Lecture Notes in Computer Science, 2005, , 429-433.	1.0	4
52	MET4: Supporting Workflow Execution for Interdisciplinary Healthcare Teams. Lecture Notes in Business Information Processing, 2015, , 40-52.	0.8	4
53	A Constraint Logic Programming Approach to Identifying Inconsistencies in Clinical Practice Guidelines for Patients with Comorbidity. Lecture Notes in Computer Science, 2011, , 296-301.	1.0	4
54	Triage of acute abdominal pain in childhood: clinical use of a palm handheld in a pediatric emergency department. , 2004, , .		3

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55	Is There a Consensus when Physicians Evaluate the Relevance of Retrieved Systematic Reviews?. Methods of Information in Medicine, 2016, 55, 292-298.	0.7	3
56	MitPlan: A Planning Approach to Mitigating Concurrently Applied Clinical Practice Guidelines. Lecture Notes in Computer Science, 2019, , 93-103.	1.0	3
57	First-order logic theory for manipulating clinical practice guidelines applied to comorbid patients: a case study. AMIA ... Annual Symposium proceedings, 2014, 2014, 892-8.	0.2	3
58	MET3: AN INTEGRATIVE OPEN SOURCE BASED MULTI-AGENT CLINICAL DECISION SUPPORT SYSTEM. , 2009, , .		2
59	Aligning Interdisciplinary Healthcare Team Behavior with Workflow Execution: An Example of a Radical Prostatectomy Workflow. , 2016, , .		2
60	Classification with test costs and background knowledge. Knowledge-Based Systems, 2016, 92, 35-42.	4.0	2
61	Supporting process execution by interdisciplinary healthcare teams: Middleware design for IBM BPM. Procedia Computer Science, 2017, 113, 376-383.	1.2	2
62	Reports of the Workshops of the Thirty-First AAAI Conference on Artificial Intelligence. AI Magazine, 2017, 38, 72-82.	1.4	2
63	Incorporating Laboratory Values Into a Machine Learning Model Improves In-Hospital Mortality Predictions After Rapid Response Team Call. , 2019, 1, e0023.		2
64	CAncer PAtients Better Life Experience (CAPABLE) First Proof-of-Concept Demonstration. Lecture Notes in Computer Science, 2021, , 298-303.	1.0	2
65	Using Constraint Logic Programming for the Verification of Customized Decision Models for Clinical Guidelines. Lecture Notes in Computer Science, 2017, , 37-47.	1.0	2
66	Fusion of clinical data: A case study to predict the type of treatment of bone fractures. International Journal of Applied Mathematics and Computer Science, 2019, 29, 51-67.	1.5	2
67	Engineering of a clinical decision support framework for the point of care use. AMIA ... Annual Symposium proceedings, 2008, , 814-8.	0.2	2
68	Assessing the motivation of MDs to use computer-based support at the point-of-care in the Emergency Department. AMIA ... Annual Symposium proceedings, 2011, 2011, 1045-54.	0.2	2
69	Fusion of Clinical Data: A Case Study to Predict the Type of Treatment of Bone Fractures. Communications in Computer and Information Science, 2017, , 294-301.	0.4	1
70	Detection of Wet Age-related Macular Degeneration in OCT Images: A Case Study. Advances in Intelligent Systems and Computing, 2018, , 43-51.	0.5	1
71	Using Secondary Knowledge to Support Decision Tree Classification of Retrospective Clinical Data. , 2007, , 238-251.		1
72	Indexing and Retrieval of Medical Resources for a Telemedical Platform. Lecture Notes in Computer Science, 2012, , 603-614.	1.0	1

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73	Developing a Decision Model for Asthma Exacerbations: Combining Rough Sets and Expert-Driven Selection of Clinical Attributes. Lecture Notes in Computer Science, 2006, , 428-437.	1.0	1
74	A Concept-Based Framework for Retrieving Evidence to Support Emergency Physician Decision Making at the Point of Care. , 2007, , 117-126.		1
75	Towards an AI Planning-Based Pipeline for the Management of Multimorbid Patients. Lecture Notes in Computer Science, 2022, , 14-23.	1.0	1
76	Representing clinical documents to support automatic retrieval of evidence from the Cochrane Library. , 2010, , .		0
77	Sequential Classification by Exploring Levels of Abstraction. Procedia Computer Science, 2014, 35, 309-317.	1.2	0
78	Preface: AIME 2019. Artificial Intelligence in Medicine, 2021, 115, 102058.	3.8	0
79	Experienced Physicians and Automatic Generation of Decision Rules from Clinical Data. Lecture Notes in Computer Science, 2010, , 207-216.	1.0	0
80	Decision Making by Emergency Room Physicians and Residents. , 2011, , 131-148.		0
81	Discovering the Preferences of Physicians with Regards to Rank-Ordered Medical Documents. Communications in Computer and Information Science, 2012, , 142-150.	0.4	0
82	Hypothesis-Driven Interactive Classification Based on AVO. Advances in Intelligent Systems and Computing, 2014, , 71-78.	0.5	0
83	Supporting an Interdisciplinary Healthcare Team with a Multi-Agent System. , 2016, , 371-382.		0
84	Expanding a First-Order Logic Mitigation Framework to Handle Multimorbid Patient Preferences. AMIA ... Annual Symposium proceedings, 2015, 2015, 895-904.	0.2	0
85	Shared Decision-Making Ontology for a Healthcare Team Executing a Workflow, an Instantiation for Metastatic Spinal Cord Compression Management. AMIA ... Annual Symposium proceedings, 2018, 2018, 877-886.	0.2	0