Cagatay Catal

List of Publications by Year in Descending Order

82 papers	2,114 citations	21 h-index	45 g-index
91 ext. papers	2,957 ext. citations	3.9 avg, IF	6.1 L-index

#	Paper	IF	Citations
82	Dairy Farm Management Information Systems. *Electronics (Switzerland)*, **2022**, 11, 239	2.6	2
81	Hybrid Blockchain Platforms for the Internet of Things (IoT): A Systematic Literature Review.. *Sensors*, **2022**, 22,	3.8	9
80	Machine Learning-Based Software Defect Prediction for Mobile Applications: A Systematic Literature Review.. *Sensors*, **2022**, 22,	3.8	3
79	Data analytics platforms for agricultural systems: A systematic literature review. *Computers and Electronics in Agriculture*, **2022**, 195, 106813	6.5	5
78	Smart Warehouses: Rationale, Challenges and Solution Directions. *Applied Sciences (Switzerland)*, **2022**, 12, 219	2.6	5
77	RESTful API Testing Methodologies: Rationale, Challenges, and Solution Directions. *Applied Sciences (Switzerland)*, **2022**, 12, 4369	2.6	1
76	Product failure detection for production lines using a data-driven model. *Expert Systems With Applications*, **2022**, 202, 117398	7.8	2
75	Deep learning-based multi-task prediction system for plant disease and species detection. *Ecological Informatics*, **2022**, 69, 101679	4.2	1
74	Techniques for Calculating Software Product Metrics Threshold Values: A Systematic Mapping Study. *Applied Sciences (Switzerland)*, **2021**, 11, 11377	2.6	1
73	Malware Detection Based on Graph Attention Networks for Intelligent Transportation Systems. *Electronics (Switzerland)*, **2021**, 10, 2534	2.6	5
72	Energy Load Forecasting Using a Dual-Stage Attention-Based Recurrent Neural Network. *Sensors*, **2021**, 21,	3.8	2
71	Systematic reviews in sentiment analysis: a tertiary study. *Artificial Intelligence Review*, **2021**, 54, 4997-5053	9.7	24
70	Analyzing the effectiveness of semi-supervised learning approaches for opinion spam classification. *Applied Soft Computing Journal*, **2021**, 101, 107023	7.5	15
69	Image-based body mass prediction of heifers using deep neural networks. *Biosystems Engineering*, **2021**, 204, 283-293	4.8	6
68	Precision nutrition: A systematic literature review. *Computers in Biology and Medicine*, **2021**, 133, 104365	7	19
67	Design of a Data Management Reference Architecture for Sustainable Agriculture. *Sustainability*, **2021**, 13, 7309	3.6	2
66	Design of a reference architecture for developing smart warehouses in industry 4.0. *Computers in Industry*, **2021**, 124, 103343	11.6	27

65	Application of machine learning to improve dairy farm management: A systematic literature review. *Preventive Veterinary Medicine*, **2021**, 187, 105237	3.1	8
64	Designing a reference architecture for health information systems. *BMC Medical Informatics and Decision Making*, **2021**, 21, 210	3.6	0
63	Automation of systematic literature reviews: A systematic literature review. *Information and Software Technology*, **2021**, 136, 106589	3.4	16
62	A hybrid DNN-LSTM model for detecting phishing URLs. *Neural Computing and Applications*, **2021**, 1-17	4.8	10
61	Obstacles and features of health information systems: A systematic literature review. *Computers in Biology and Medicine*, **2021**, 137, 104785	7	4
60	A Multi-Channel Convolutional Neural Network approach to automate the citation screening process. *Applied Soft Computing Journal*, **2021**, 112, 107765	7.5	3
59	A decision support system for automating document retrieval and citation screening. *Expert Systems With Applications*, **2021**, 182, 115261	7.8	2
58	A Firewall Policy Anomaly Detection Framework for Reliable Network Security. *IEEE Transactions on Reliability*, **2021**, 1-9	4.6	4
57	Remaining Useful Life (RUL) Prediction of Equipment in Production Lines Using Artificial Neural Networks. *Sensors*, **2021**, 21,	3.8	15
56	Development of a recurrent neural networks-based calving prediction model using activity and behavioral data. *Computers and Electronics in Agriculture*, **2020**, 170, 105285	6.5	11
55	Sensor Failure Tolerable Machine Learning-Based Food Quality Prediction Model. *Sensors*, **2020**, 20,	3.8	9
54	Obstacles of On-Premise Enterprise Resource Planning Systems and Solution Directions. *Journal of Computer Information Systems*, **2020**, 1-12	1.9	4
53	Model analytics for defect prediction based on design-level metrics and sampling techniques **2020**, 125-139		3
52	Evaluation of augmented reality technology for the design of an evacuation training game. *Virtual Reality*, **2020**, 24, 359-368	6	9
51	Machine learning applications in production lines: A systematic literature review. *Computers and Industrial Engineering*, **2020**, 149, 106773	6.4	31
50	Crop yield prediction using machine learning: A systematic literature review. *Computers and Electronics in Agriculture*, **2020**, 177, 105709	6.5	156
49	A domain-specific language framework for farm management information systems in precision agriculture. *Precision Agriculture*, **2020**, 22, 1067	5.6	7
48	Closing the Gap Between Software Engineering Education and Industrial Needs. *IEEE Software*, **2020**, 37, 68-77	1.5	27

47	Coronaviruses and people with intellectual disability: an exploratory data analysis. *Journal of Intellectual Disability Research*, **2020**, 64, 475-481	3.2	25
46	Analysis of transfer learning for deep neural network based plant classification models. *Computers and Electronics in Agriculture*, **2019**, 158, 20-29	6.5	146
45	Performance tuning for machine learning-based software development effort prediction models. *Turkish Journal of Electrical Engineering and Computer Sciences*, **2019**, 1308-1324	0.9	5
44	Aligning software engineering education with industrial needs: A meta-analysis. *Journal of Systems and Software*, **2019**, 156, 65-83	3.3	17
43	The impact of feature types, classifiers, and data balancing techniques on software vulnerability prediction models. *Journal of Software: Evolution and Process*, **2019**, 31, e2164	1	2
42	Native Code Generation as a Service. *International Journal of Software Engineering and Knowledge Engineering*, **2019**, 29, 263-284	1	1
41	Aligning Education for the Life Sciences Domain to Support Digitalization and Industry 4.0. *Procedia Computer Science*, **2019**, 158, 99-106	1.6	22
40	Empirical analysis of change metrics for software fault prediction. *Computers and Electrical Engineering*, **2018**, 67, 15-24	4.3	40
39	On the effectiveness of virtual reality in the education of software engineering. *Computer Applications in Engineering Education*, **2018**, 26, 918-927	1.6	24
38	Automatic energy expenditure measurement for health science. *Computer Methods and Programs in Biomedicine*, **2018**, 157, 31-37	6.9	3
37	A cloud-based recommendation service using principle component analysis-scale-invariant feature transform algorithm. *Neural Computing and Applications*, **2017**, 28, 2859-2868	4.8	1
36	Development of a Software Vulnerability Prediction Web Service Based on Artificial Neural Networks. *Lecture Notes in Computer Science*, **2017**, 59-67	0.9	10
35	Automatic Software Categorization Using Ensemble Methods and Bytecode Analysis. *International Journal of Software Engineering and Knowledge Engineering*, **2017**, 27, 1129-1144	1	3
34	Product review management software based on multiple classifiers. *IET Software*, **2017**, 11, 89-92	1	14
33	Virtual reality based rehabilitation system for Parkinson and multiple sclerosis patients **2017**,		4
32	A sentiment classification model based on multiple classifiers. *Applied Soft Computing Journal*, **2017** , 50, 135-141	7.5	116
31	Neuro-Fuzzy Modeling for Multi-Objective Test Suite Optimization. *Journal of Intelligent Systems*, **2016**, 25, 123-146	1.5	1
30	The use of cross-company fault data for the software fault prediction problem. *Turkish Journal of Electrical Engineering and Computer Sciences*, **2016**, 24, 3714-3723	0.9	6

29	Improvement of Demand Forecasting Models with Special Days. *Procedia Computer Science*, **2015**, 59, 262-267	1.6	4
28	On the use of ensemble of classifiers for accelerometer-based activity recognition. *Applied Soft Computing Journal*, **2015**, 37, 1018-1022	7.5	132
27	A Comparison of Semi-Supervised Classification Approaches for Software Defect Prediction. *Journal of Intelligent Systems*, **2014**, 23, 75-82	1.5	23
26	Test case prioritization: a systematic mapping study. *Software Quality Journal*, **2013**, 21, 445-478	1.2	96
25	Software mining and fault prediction. *Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery*, **2012**, 2, 420-426	6.9	3
24	On the application of genetic algorithms for test case prioritization **2012**,		10
23	The Ten Best Practices for Test Case Prioritization. *Communications in Computer and Information Science*, **2012**, 452-459	0.3	3
22	Application of Artificial Immune Systems Paradigm for Developing Software Fault Prediction Models **2012**, 371-387		1
21	Class noise detection based on software metrics and ROC curves. *Information Sciences*, **2011**, 181, 4867-4877	7.7	32
20	Practical development of an Eclipse-based software fault prediction tool using Naive Bayes algorithm. *Expert Systems With Applications*, **2011**, 38, 2347-2353	7.8	60
19	Thresholds based outlier detection approach for mining class outliers: An empirical case study on software measurement datasets. *Expert Systems With Applications*, **2011**, 38, 3440-3445	7.8	16
18	Software fault prediction: A literature review and current trends. *Expert Systems With Applications*, **2011**, 38, 4626-4636	7.8	190
17	Metrics-Driven Software Quality Prediction Without Prior Fault Data. *Lecture Notes in Electrical Engineering*, **2010**, 189-199	0.2	7
16	Unlabelled extra data do not always mean extra performance for semi-supervised fault prediction. *Expert Systems*, **2009**, 26, 458-471	2.1	22
15	A systematic review of software fault prediction studies. *Expert Systems With Applications*, **2009**, 36, 7346-7354	7.8	324
14	Investigating the effect of dataset size, metrics sets, and feature selection techniques on software fault prediction problem. *Information Sciences*, **2009**, 179, 1040-1058	7.7	188
13	Clustering and Metrics Thresholds Based Software Fault Prediction of Unlabeled Program Modules **2009**,		35
12	An outlier detection algorithm based on object-oriented metrics thresholds **2009**,		3

11	A Fault Prediction Model with Limited Fault Data to Improve Test Process. *Lecture Notes in Computer Science*, **2008**, 244-257	0.9	15
10	A Conceptual Framework to Integrate Fault Prediction Sub-Process for Software Product Lines **2008**,		2
9	An Artificial Immune System Approach for Fault Prediction in Object-Oriented Software **2007**,		18
8	Software Fault Prediction with Object-Oriented Metrics Based Artificial Immune Recognition System. *Lecture Notes in Computer Science*, **2007**, 300-314	0.9	21
7	Hybrid Deep Learning-based Models for Crop Yield Prediction. *Applied Artificial Intelligence*,1-18	2.3	6
6	Deep learning for crop yield prediction: a systematic literature review. *New Zealand Journal of Crop and Horticultural Science*,1-26	0.9	1
5	Application of Artificial Immune Systems Paradigm for Developing Software Fault Prediction Models76-93		1
4	Applications of deep learning for mobile malware detection: A systematic literature review. *Neural Computing and Applications*,1	4.8	1
3	A feature-based approach for guiding the selection of Internet of Things cybersecurity standards using text mining. *Concurrency Computation Practice and Experience*,e6385	1.4	
2	Computer vision-based weight estimation of livestock: a systematic literature review. *New Zealand Journal of Agricultural Research*,1-21	1.9	5
1	Predicting Plasma Vitamin C Using Machine Learning. *Applied Artificial Intelligence*,1-28	2.3	0