Xiao Liu

List of Publications by Year
in descending order

129 papers	2,501 citations	304743 22 h-index	276875 41 g-index
134 all docs	134 docs citations	134 times ranked	1716 citing authors

#	Article	IF	Citations
1	3D Intracranial Aneurysm Classification and Segmentation via Unsupervised Dual-Branch Learning. IEEE Journal of Biomedical and Health Informatics, 2023, 27, 1770-1779.	6.3	3
2	Runtime Verification of Business Cloud Workflow Temporal Conformance. IEEE Transactions on Services Computing, 2022, 15, 833-846.	4.6	1
3	Solving the last mile problem in logistics: A mobile edge computing and blockchainâ€based unmanned aerial vehicle delivery system. Concurrency Computation Practice and Experience, 2022, 34, e6068.	2.2	18
4	Energy-Aware Computation Management Strategy for Smart Logistic System With MEC. IEEE Internet of Things Journal, 2022, 9, 8544-8559.	8.7	14
5	Exploiting gated graph neural network for detecting and explaining self-admitted technical debts. Journal of Systems and Software, 2022, 187, 111219.	4.5	8
6	Tight Lower bound on power consumption for scheduling real-time periodic tasks in core-level DVFS systems. Parallel Computing, 2022, 110, 102892.	2.1	1
7	Popularity prediction for marketer-generated content: A text-guided attention neural network for multi-modal feature fusion. Information Processing and Management, 2022, 59, 102984.	8.6	4
8	Edge-Computing-Based Intelligent IoT: Architectures, Algorithms and Applications. Sensors, 2022, 22, 4464.	3.8	1
9	<scp>Energyâ€aware decisionâ€making</scp> for dynamic task migration in <scp>MEC</scp>â€based unmanned aerial vehicle delivery system. Concurrency Computation Practice and Experience, 2021, 33, e6092.	2.2	5
10	SCNET: A Novel UGI Cancer Screening Framework Based on Semantic-Level Multimodal Data Fusion. IEEE Journal of Biomedical and Health Informatics, 2021, 25, 143-151.	6.3	11
11	A novel cloud workflow scheduling algorithm based on stable matching game theory. Journal of Supercomputing, 2021, 77, 11597-11624.	3.6	6
12	ServiceBERT: A Pre-trained Model for Web Service Tagging and Recommendation. Lecture Notes in Computer Science, 2021, , 464-478.	1.3	6
13	Statistical Model Checking-Based Evaluation and Optimization for Cloud Workflow Resource Allocation. IEEE Transactions on Cloud Computing, 2020, 8, 443-458.	4.4	17
14	Detecting topic-level influencers in large-scale scientific networks. World Wide Web, 2020, 23, 831-851.	4.0	2
15	Endoscopy report mining for intelligent gastric cancer screening. Expert Systems, 2020, 37, e12504.	4.5	0
16	TDD4Fog: A Test-Driven Software Development Platform for Fog Computing Systems. , 2020, , .		3
17	FengHuoLun: A Federated Learning based Edge Computing Platform for Cyber-Physical Systems. , 2020, , .		15
18	Graph4Edge: A Graph-based Computation Offloading Strategy for Mobile-Edge Workflow Applications. , 2020, , .		12

#	Article	IF	Citations
19	Mobility-Aware Workflow Offloading and Scheduling Strategy for Mobile Edge Computing. Lecture Notes in Computer Science, 2020, , 184-199.	1.3	7
20	A homogeneous ensemble method for predicting gastric cancer based on gastroscopy reports. Expert Systems, 2020, 37, e12499.	4.5	4
21	BlockMeds: A Blockchain-Based Online Prescription System with Privacy Protection. Lecture Notes in Computer Science, 2020, , 299-303.	1.3	2
22	A Spatial and Sequential Combined Method for Web Service Classification. Lecture Notes in Computer Science, 2020, , 764-778.	1.3	4
23	EXPRESS. , 2020, , .		12
24	Verification of Microservices Using Metamorphic Testing. Lecture Notes in Computer Science, 2020, , 138-152.	1.3	0
25	A Novel Throughput Based Temporal Violation Handling Strategy for Instance-Intensive Cloud Business Workflows. Communications in Computer and Information Science, 2020, , 698-708.	0.5	0
26	Reducing delay penalty of multiple concurrent software projects based on overtime planning. , 2020, , .		1
27	SmartVM: a SLA-aware microservice deployment framework. World Wide Web, 2019, 22, 275-293.	4.0	35
28	An Energy-Efficient and Deadline-Aware Task Offloading Strategy Based on Channel Constraint for Mobile Cloud Workflows. IEEE Access, 2019, 7, 69858-69872.	4.2	21
29	A Survey on Multimodal Data-Driven Smart Healthcare Systems: Approaches and Applications. IEEE Access, 2019, 7, 133583-133599.	4.2	74
30	On Improving the accuracy with Auto-Encoder on Conjunctivitis. Applied Soft Computing Journal, 2019, 81, 105489.	7.2	37
31	Diabetic complication prediction using a similarity-enhanced latent Dirichlet allocation model. Information Sciences, 2019, 499, 12-24.	6.9	14
32	A Cost-Effective Time-Constrained Multi-workflow Scheduling Strategy in Fog Computing. Lecture Notes in Computer Science, 2019, , 194-207.	1.3	17
33	FogWorkflowSim: An Automated Simulation Toolkit for Workflow Performance Evaluation in Fog Computing. , 2019, , .		32
34	Data Placement Cost Optimization and Load Balancing for Online Social Networks. , 2019, , .		1
35	Service matchmaking for Internet of Things based on probabilistic topic model. Future Generation Computer Systems, 2019, 94, 272-281.	7.5	5
36	Prediction of collective actions using deep neural network and species competition model on social media. World Wide Web, 2019, 22, 2379-2405.	4.0	3

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37	Is deep learning better than traditional approaches in tag recommendation for software information sites?. Information and Software Technology, 2019, 109, 1-13.	4.4	28
38	A Novel Workflow-Level Data Placement Strategy for Data-Sharing Scientific Cloud Workflows. IEEE Transactions on Services Computing, 2019, 12, 370-383.	4.6	23
39	An Algorithm for Finding the Minimum Cost of Storing and Regenerating Datasets in Multiple Clouds. IEEE Transactions on Cloud Computing, 2018, 6, 519-531.	4.4	7
40	Soft error-aware energy-efficient task scheduling for workflow applications in DVFS-enabled cloud. Journal of Systems Architecture, 2018, 84, 12-27.	4.3	54
41	Efficient Dynamic Service Maintenance for Edge Services. IEEE Access, 2018, 6, 8829-8840.	4.2	6
42	Group recommendation based on a bidirectional tensor factorization model. World Wide Web, 2018, 21, 961-984.	4.0	15
43	Predicting temporal violations for parallel business cloud workflows. Software - Practice and Experience, 2018, 48, 775-795.	3.6	2
44	COMEC: Computation Offloading for Video-Based Heart Rate Detection APP in Mobile Edge Computing. , 2018, , .		10
45	Sliding-window based Propagation-aware Temporal Verification for Monitoring Parallel Cloud Business Workflows. , 2018, , .		1
46	Self-Adaptive K-Means Based on a Covering Algorithm. Complexity, 2018, 2018, 1-16.	1.6	4
47	CommuteShare: A Ridesharing Service for Daily Commuters Using Cross-Domain Urban Big Data. , 2018, , .		3
48	FastTagRec: fast tag recommendation for software information sites. Automated Software Engineering, 2018, 25, 675-701.	2.9	27
49	A sufficient and necessary temporal violation handling point selection strategy in cloud workflow. Future Generation Computer Systems, 2018, 86, 464-479.	7.5	23
50	Decision Support for Project Rescheduling to Reduce Software Development Delays based on Ant Colony Optimization. International Journal of Computational Intelligence Systems, 2018, 11, 894.	2.7	3
51	Adaptive Temporal Verification and Violation Handling for Time-Constrained Business Cloud Workflows. Lecture Notes in Computer Science, 2018, , 90-99.	1.3	0
52	A Twoâ€Stage Service Replica Strategy for Business Process Efficiency Optimization in Community Cloud. Chinese Journal of Electronics, 2017, 26, 80-87.	1.5	6
53	BigVM: A Multi-Layer-Microservice-Based Platform for Deploying SaaS. , 2017, , .		8
54	Unlicensed Taxis Detection Service Based on Large-Scale Vehicles Mobility Data. , 2017, , .		10

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55	Propagation-Aware Temporal Verification for Parallel Business Cloud Workflows. , 2017, , .		3
56	The Bayesian Network based program dependence graph and its application to fault localization. Journal of Systems and Software, 2017, 134, 44-53.	4.5	25
57	A novel collective matrix factorization model for recommendation with fine‐grained social trust prediction. Concurrency Computation Practice and Experience, 2017, 29, e4233.	2.2	4
58	PaaS - Black or White: An Investigation into Software Development Model for Building Retail Industry SaaS. , 2017, , .		5
59	Let Smart Ants Help You Reduce the Delay Penalty of Multiple Software Projects. , 2017, , .		1
60	SmartVM: A Multi-Layer Microservice-Based Platform for Deploying SaaS. , 2017, , .		0
61	A Dynamic Pricing Reverse Auction-Based Resource Allocation Mechanism in Cloud Workflow Systems. Scientific Programming, 2016, 2016, 1-13.	0.7	6
62	Workflow temporal verification for monitoring parallel business processes. Journal of Software: Evolution and Process, 2016, 28, 286-302.	1.6	8
63	Where to Fix Temporal Violations: A Novel Handling Point Selection Strategy for Business Cloud Workflows. , 2016, , .		11
64	Bayesian Network Based Program Dependence Graph for Fault Localization. , 2016, , .		4
65	A Novel Fine-Grained User Trust Relation Prediction for Improving Recommendation Accuracy. , 2016, , .		2
66	User Role Analysis in Online Social Networks Based on Dirichlet Process Mixture Models. , 2016, , .		2
67	Exploring the Effectiveness of True Abnormal Data Elimination in Context-Aware Web Services Recommendation. , 2016, , .		1
68	Identifying social influence in complex networks: A novel conductance eigenvector centrality model. Neurocomputing, 2016, 210, 141-154.	5.9	26
69	A novel framework for semantic entity identification and relationship integration in large scale text data. Future Generation Computer Systems, 2016, 64, 198-210.	7.5	5
70	An Effective Energy Testing Framework for Cloud Workflow Activities. Communications in Computer and Information Science, 2016, , 89-105.	0.5	0
71	Ant colony algorithm based scheduling for handling software project delay. , 2015, , .		3
72	An Epidemic Model Based Temporal Violation Prediction Strategy for Large Batch of Parallel Business Cloud Workflows. , 2015, , .		2

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73	A Novel APP Recommendation Method Based on SVD and Social Influence. Lecture Notes in Computer Science, 2015, , 269-281.	1.3	2
74	Energy Consumption Prediction Based on Time-Series Models for CPU-Intensive Activities in the Cloud. Lecture Notes in Computer Science, 2015, , 756-769.	1.3	0
75	Dynamic On-the-Fly Minimum Cost Benchmarking for Storing Generated Scientific Datasets in the Cloud. IEEE Transactions on Computers, 2015, 64, 2781-2795.	3.4	9
76	Necessary and sufficient checkpoint selection for temporal verification of high-confidence cloud workflow systems. Science China Information Sciences, 2015, 58, 1-16.	4.3	12
77	Time-Series Pattern Based Effective Noise Generation for Privacy Protection on Cloud. IEEE Transactions on Computers, 2015, 64, 1456-1469.	3.4	23
78	Power consumption prediction of web services for energy-efficient service selection. Personal and Ubiquitous Computing, 2015, 19, 1063-1073.	2.8	7
79	A MapReduce Reinforced Distributed Sequential Pattern Mining Algorithm. Lecture Notes in Computer Science, 2015, , 183-197.	1.3	7
80	Big Data Analytics and Visualization with Spatio-Temporal Correlations for Traffic Accidents. Lecture Notes in Computer Science, 2015, , 255-268.	1.3	3
81	Temporal Verification for Scientific Cloud Workflows: State-of-the-Art and Research Challenges. Communications in Computer and Information Science, 2015, , 59-74.	0.5	0
82	Variation-Aware Resource Allocation Evaluation for Cloud Workflows Using Statistical Model Checking. , 2014, , .		2
83	Temporal Verification for Business Cloud Workflows: Open Research Issues. , 2014, , .		1
84	Do we need to handle every temporal violation in scientific workflow systems?. ACM Transactions on Software Engineering and Methodology, 2014, 23, 1-34.	6.0	54
85	Throughput based temporal verification for monitoring large batch of parallel processes. , 2014, , .		15
86	The Design of a Workflow Recommendation System for Workflow as a Service in the Cloud. Lecture Notes in Business Information Processing, 2014, , 251-263.	1.0	1
87	A gaussian fields based mining method for semi-automating staff assignment in workflow application. , 2014, , .		2
88	A novel quantitative evaluation approach for software project schedules using statistical model checking. , 2014, , .		10
89	Cloud Data Management for Scientific Workflows: Research Issues, Methodologies, and State-of-the-Art. , 2014, , .		8
90	Queueing Theory Based Service Replica Strategy for Business Process Efficiency Optimization in Community Cloud. , 2014, , .		3

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91	Efficient Two-Phase Approaches for Branch-and-Bound Style Resource Constrained Scheduling. , 2014, , .		2
92	Logistics scheduling based on cloud business workflows. , 2014, , .		3
93	Workflow temporal verification: an efficient and effective approach for delivering on-time completion (Abstract Only). , 2014, , .		1
94	A Highly Practical Approach toward Achieving Minimum Data Sets Storage Cost in the Cloud. IEEE Transactions on Parallel and Distributed Systems, 2013, 24, 1234-1244.	5.6	68
95	An Algorithm for Cost-Effectively Storing Scientific Datasets with Multiple Service Providers in the Cloud. , 2013, , .		11
96	Selecting checkpoints along the time line: A novel temporal checkpoint selection strategy for monitoring a batch of parallel business processes. , 2013, , .		11
97	Extracting the semantic content of web pages via repeated structures. , 2013, , .		0
98	A Novel Deadline Assignment Strategy for a Large Batch of Parallel Tasks with Soft Deadlines in the Cloud. , 2013, , .		8
99	A market-oriented hierarchical scheduling strategy inÂcloud workflow systems. Journal of Supercomputing, 2013, 63, 256-293.	3.6	205
100	A DT-SVM Strategy for Stock Futures Prediction with Big Data. , 2013, , .		23
101	Novel Client-Cloud Architecture for Scalable Instance-Intensive Workflow Systems. Lecture Notes in Computer Science, 2013, , 270-284.	1.3	6
102	Semantic Entity Identification in Large Scale Data via Statistical Features and DT-SVM. Lecture Notes in Computer Science, 2013, , 354-367.	1.3	0
103	A Time-Series Pattern Based Noise Generation Strategy for Privacy Protection in Cloud Computing. , 2012, , .		11
104	Case Study: SwinDeW-C Cloud Workflow System. SpringerBriefs in Computer Science, 2012, , 51-68.	0.2	0
105	The Design of Cloud Workflow Systems. SpringerBriefs in Computer Science, 2012, , .	0.2	43
106	A data dependency based strategy for intermediate data storage in scientific cloud workflow systems. Concurrency Computation Practice and Experience, 2012, 24, 956-976.	2.2	57
107	Cloud Workflow System Quality of Service. SpringerBriefs in Computer Science, 2012, , 27-50.	0.2	4
108	Preventing Temporal Violations in Scientific Workflows: Where and How. IEEE Transactions on Software Engineering, 2011, 37, 805-825.	5.6	58

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109	A Generic QoS Framework for Cloud Workflow Systems. , 2011, , .		31
110	A novel general framework for automatic and cost-effective handling of recoverable temporal violations in scientific workflow systems. Journal of Systems and Software, 2011, 84, 492-509.	4.5	28
111	A probabilistic strategy for temporal constraint management in scientific workflow systems. Concurrency Computation Practice and Experience, 2011, 23, 1893-1919.	2.2	21
112	On-demand minimum cost benchmarking for intermediate dataset storage in scientific cloud workflow systems. Journal of Parallel and Distributed Computing, 2011, 71, 316-332.	4.1	73
113	A novel statistical time-series pattern based interval forecasting strategy for activity durations in workflow systems. Journal of Systems and Software, 2011, 84, 354-376.	4.5	61
114	A Local-Optimisation Based Strategy for Cost-Effective Datasets Storage of Scientific Applications in the Cloud. , 2011, , .		16
115	Computation and Storage Trade-Off for Cost-Effectively Storing Scientific Datasets in the Cloud. , 2011, , 129-153.		3
116	A data placement strategy in scientific cloud workflows. Future Generation Computer Systems, 2010, 26, 1200-1214.	7.5	293
117	Integrating classification capability and reliability in associative classification: A Î²-stronger model. Expert Systems With Applications, 2010, 37, 3953-3961.	7.6	2
118	A Revised Discrete Particle Swarm Optimization for Cloud Workflow Scheduling. , 2010, , .		161
119	A Compromised-Time-Cost Scheduling Algorithm in SwinDeW-C for Instance-Intensive Cost-Constrained Workflows on a Cloud Computing Platform. International Journal of High Performance Computing Applications, 2010, 24, 445-456.	3.7	116
120	A cost-effective strategy for intermediate data storage in scientific cloud workflow systems. , 2010, , .		63
121	An Effective Framework of Light-Weight Handling for Three-Level Fine-Grained Recoverable Temporal Violations in Scientific Workflows. , 2010, , .		4
122	Handling Recoverable Temporal Violations in Scientific Workflow Systems: A Workflow Rescheduling Based Strategy. , 2010, , .		17
123	SwinDeW-C: A Peer-to-Peer Based Cloud Workflow System. , 2010, , 309-332.		36
124	CSMC: A combination strategy for multi-class classification based on multiple association rules. Knowledge-Based Systems, 2008, 21, 786-793.	7.1	45
125	Expert system for remnant life prediction of defected components under fatigue and creepâ€"fatigue loadings. Expert Systems With Applications, 2008, 34, 222-230.	7.6	19
126	An Algorithm in SwinDeW-C for Scheduling Transaction-Intensive Cost-Constrained Cloud Workflows. , 2008, , .		38

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127	Forecasting Duration Intervals of Scientific Workflow Activities Based on Time-Series Patterns. , 2008, , .		15
128	A QSQL-based Efficient Planning Algorithm for Fully-automated Service Composition in Dynamic Service Environments. , 2008, , .		17
129	A Probabilistic Strategy for Setting Temporal Constraints in Scientific Workflows. Lecture Notes in Computer Science, 2008, , 180-195.	1.3	17