## Soumya K K Ghosh

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	iFogSim: A toolkit for modeling and simulation of resource management techniques in the Internet of Things, Edge and Fog computing environments. Software - Practice and Experience, 2017, 47, 1275-1296.	3.6	972
2	Mobi-IoST: Mobility-Aware Cloud-Fog-Edge-IoT Collaborative Framework for Time-Critical Applications. IEEE Transactions on Network Science and Engineering, 2020, 7, 2271-2285.	6.4	83
3	Student performance analysis and prediction in classroom learning: A review of educational data mining studies. Education and Information Technologies, 2021, 26, 205-240.	5.7	81
4	Deep-STEP: A Deep Learning Approach for Spatiotemporal Prediction of Remote Sensing Data. IEEE Geoscience and Remote Sensing Letters, 2016, 13, 1984-1988.	3.1	71
5	Spatial Interpolation to Predict Missing Attributes in GIS Using Semantic Kriging. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 4771-4780.	6.3	68
6	Online Public Shaming on Twitter: Detection, Analysis, and Mitigation. IEEE Transactions on Computational Social Systems, 2019, 6, 208-220.	4.4	62
7	Holistic resource management for sustainable and reliable cloud computing: An innovative solution to global challenge. Journal of Systems and Software, 2019, 155, 104-129.	4.5	55
8	A Deep-Learning-Based Forecasting Ensemble to Predict Missing Data for Remote Sensing Analysis. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 5228-5236.	4.9	49
9	A Probabilistic Nonlinear Model for Forecasting Daily Water Level in Reservoir. Water Resources Management, 2016, 30, 3107-3122.	3.9	44
10	Internet of Health Things (IoHT) for personalized health care using integrated edge-fog-cloud network. Journal of Ambient Intelligence and Humanized Computing, 2021, 12, 943-959.	4.9	44
11	Mobile metadata assisted community database of chronic wound images. Wound Medicine, 2014, 6, 34-42.	2.7	42
12	Adaptive data aggregation and energy efficiency using network coding in a clustered wireless sensor network: An analytical approach. Computer Communications, 2014, 40, 65-75.	5.1	41
13	FogloHT: A weighted majority game theory based energy-efficient delay-sensitive fog network for internet of health things. Internet of Things (Netherlands), 2020, 11, 100181.	7.7	40
14	semBnet: A semantic Bayesian network for multivariate prediction of meteorological time series data. Pattern Recognition Letters, 2017, 93, 192-201.	4.2	37
15	FB-STEP: A fuzzy Bayesian network based data-driven framework for spatio-temporal prediction of climatological time series data. Expert Systems With Applications, 2019, 117, 211-227.	7.6	35
16	Data-driven approaches for meteorological time series prediction: A comparative study of the state-of-the-art computational intelligence techniques. Pattern Recognition Letters, 2018, 105, 155-164.	4.2	34
17	On Network Lifetime Expectancy With Realistic Sensing and Traffic Generation Model in Wireless Sensor Networks. IEEE Sensors Journal, 2013, 13, 2771-2779.	4.7	30
18	Measuring Moran's I in a Cost-Efficient Manner to Describe a Land-Cover Change Pattern in Large-Scale Remote Sensing Imagery. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 2631-2639.	4.9	27

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19	Time–frequency masking based supervised speech enhancement framework using fuzzy deep belief network. Applied Soft Computing Journal, 2019, 74, 583-602.	7.2	25
20	MARIO: A spatio-temporal data mining framework on Google Cloud to explore mobility dynamics from taxi trajectories. Journal of Network and Computer Applications, 2020, 164, 102692.	9.1	24
21	FORWARD: A Model for FOrecasting Reservoir WAteR Dynamics Using Spatial Bayesian Network (SpaBN). IEEE Transactions on Knowledge and Data Engineering, 2017, 29, 842-855.	5.7	23
22	A probabilistic approach for weather forecast using spatio-temporal inter-relationships among climate variables. , 2014, , .		21
23	Data mining based analysis to explore the effect of teaching on student performance. Education and Information Technologies, 2018, 23, 1677-1697.	5.7	19
24	THUMP., 2016,,.		18
25	Modeling of Human Movement Behavioral Knowledge from GPS Traces for Categorizing Mobile Users. , 2017, , .		17
26	Random wheel: An algorithm for early classification of student performance with confidence. Engineering Applications of Artificial Intelligence, 2021, 102, 104270.	8.1	15
27	Spatio-Fog: A green and timeliness-oriented fog computing model for geospatial query resolution. Simulation Modelling Practice and Theory, 2020, 100, 102043.	3.8	14
28	Performance Evaluation of Semantic Kriging: A Euclidean Vector Analysis Approach. IEEE Geoscience and Remote Sensing Letters, 2015, 12, 1185-1189.	3.1	12
29	Exploring the association between mobility behaviours and academic performances of students: a context-aware traj-graph (CTC) analysis. Progress in Artificial Intelligence, 2018, 7, 307-326.	2.4	12
30	CLAWER: Context-aware Cloud-Fog based Workflow Management Framework for Health Emergency Services. , 2020, , .		12
31	RESCUE: Enabling green healthcare services using integrated IoTâ€edgeâ€fogâ€cloud computing environments. Software - Practice and Experience, 2022, 52, 1615-1642.	3.6	12
32	Ontology based framework for semantic resolution of geospatial query. , 2012, , .		11
33	Locator: A Cloud-Fog-Enabled Framework for Facilitating Efficient Location based Services. , 2020, , .		11
34	CoMCLOUD: Virtual Machine Coalition for Multi-Tier Applications Over Multi-Cloud Environments. IEEE Transactions on Cloud Computing, 2023, 11, 956-970.	4.4	11
35	Time-series augmentation of semantic kriging for the prediction of meteorological parameters. , 2015, ,		10
36	Enhancing Reliability of Vehicular Participatory Sensing Network: A Bayesian Approach. , 2016, , .		9

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37	A cost-efficient approach for measuring Moran's index of spatial autocorrelation in geostationary satellite data. , 2016, , .		9
38	BESTED., 2017,,.		9
39	Modeling Individual's Movement Patterns to Infer Next Location from Sparse Trajectory Traces. , 2018, , .		9
40	Activity-based Mobility Profiling. , 2018, , .		9
41	Traj-Cloud: A Trajectory Cloud for enabling Efficient Mobility Services. , 2019, , .		9
42	A Geospatial Orchestration Framework on Cloud for Processing User Queries. , 2016, , .		8
43	A multiâ€objective framework for analysis of road network vulnerability for relief facility location during flood hazards: A case study of relief location analysis in Bankura District, India. Transactions in GIS, 2018, 22, 1064-1082.	2.3	8
44	Data-Driven Approaches for Spatio-Temporal Analysis: A Survey of the State-of-the-Arts. Journal of Computer Science and Technology, 2020, 35, 665-696.	1.5	8
45	Reducing Parameter Value Uncertainty in Discrete Bayesian Network Learning: A Semantic Fuzzy Bayesian Approach. IEEE Transactions on Emerging Topics in Computational Intelligence, 2021, 5, 361-372.	4.9	8
46	CONFRONT: Cloud-fog-dew based monitoring framework for COVID-19 management. Internet of Things (Netherlands), 2021, 16, 100459.	7.7	8
47	Automatic Resolution of Semantic Heterogeneity in GIS: An Ontology Based Approach. Smart Innovation, Systems and Technologies, 2014, , 585-591.	0.6	8
48	SARDINE. ACM Transactions on Spatial Algorithms and Systems, 2020, 6, 1-26.	1.4	8
49	Short-term prediction of land surface temperature using multifractal detrended fluctuation analysis. , 2014, , .		7
50	Spatio-temporal Prediction under Scarcity of Influencing Variables: A Hybrid Probabilistic Graph-based Approach. , 2017, , .		7
51	Stark: Fast and Scalable Strassen's Matrix Multiplication Using Apache Spark. IEEE Transactions on Big Data, 2022, 8, 699-710.	6.1	7
52	Spatioâ€ŧemporal prediction of land surface temperature using semantic kriging. Transactions in GIS, 2020, 24, 189-212.	2.3	7
53	PTC: Pick-Test-Choose to Place Containerized Micro-Services in IoT. , 2019, , .		6

54 MovCloud: A Cloud-Enabled Framework to Analyse Movement Behaviors. , 2019, , .

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55	A fast scalable distributed kriging algorithm using Spark framework. International Journal of Data Science and Analytics, 2020, 10, 249-264.	4.1	6
56	Geospatial Edge-Fog Computing: A Systematic Review, Taxonomy, and Future Directions. , 2021, , 47-69.		6
57	Analysing the impact of poor teaching on student performance. , 2016, , .		5
58	DCAP: A deep convolution architecture for prediction of urban growth. , 2016, , .		5
59	Measuring semantic similarity between land-cover classes for spatial analysis: an ontology hierarchy exploration approach. Innovations in Systems and Software Engineering, 2016, 12, 193-200.	2.1	5
60	Spatio-Temporal Prediction of Meteorological Time Series Data: An Approach Based on Spatial Bayesian Network (SpaBN). Lecture Notes in Computer Science, 2017, , 615-622.	1.3	5
61	Green Containerized Service Consolidation in Cloud. , 2020, , .		5
62	Spatio-temporal Autocorrelation Analysis for Regional Land-cover Change Detection from Remote Sensing Data. , 2017, , .		4
63	FPGA Implementation of a Phase-Aware Single-Channel Speech Enhancement System. Circuits, Systems, and Signal Processing, 2017, 36, 4688-4715.	2.0	4
64	Space-time Prediction of High Resolution Raster Data. , 2019, , .		4
65	Geo-Cloudlet: Time and Power Efficient Geospatial Query Resolution using Cloudlet. , 2019, , .		4
66	Enhanced Bayesian Network Models for Spatial Time Series Prediction. Studies in Computational Intelligence, 2020, , .	0.9	4
67	LYRIC: Deadline and Budget Aware Spatio-Temporal Query Processing in Cloud. IEEE Transactions on Services Computing, 2022, 15, 2869-2882.	4.6	4
68	Does Climate Variability Impact COVID-19 Outbreak? An Enhanced Semantics-Driven Theory-Guided Model. SN Computer Science, 2021, 2, 452.	3.6	4
69	Introduction to Mobile Edge Computing. , 2021, , 3-19.		4
70	Hybrid Path Planner for Efficient Navigation in Urban Road Networks through Analysis of Trajectory Traces. , 2018, , .		3
71	Analyzing Impact of Climate Variability on COVID-19 Outbreak: A Semantically-enhanced Theory-guided Data-driven Approach. , 2021, , .		3
72	Deep Recurrent Neural Network Based Monaural Speech Separation Using Recurrent Temporal Restricted Boltzmann Machines. , 0, , .		3

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73	Mobility Driven Cloud-Fog-Edge Framework for Location-Aware Services: A Comprehensive Review. , 2021, , 229-249.		3
74	Influence modeling of opinion switching by Twitter users in public shaming events. Social Network Analysis and Mining, 2020, 10, 1.	2.8	2
75	Power-efficient and Latency-aware Offloading in Energy-harvested Cloud-enabled Small cell Network. , 2020, , .		2
76	Containerized deployment of micro-services in fog devices: a reinforcement learning-based approach. Journal of Supercomputing, 2022, 78, 6817-6845.	3.6	2
77	A Multilayered Adaptive Recurrent Incremental Network Model for Heterogeneity-Aware Prediction of Derived Remote Sensing Image Time Series. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-13.	6.3	2
78	Modeling Spatio-temporal Change Pattern using Mathematical Morphology. , 2016, , .		1
79	Improving the Performance of Deep Learning Based Speech Enhancement System Using Fuzzy Restricted Boltzmann Machine. Lecture Notes in Computer Science, 2017, , 534-542.	1.3	1
80	Exploring Mobility Behaviours of Moving Agents from Trajectory traces in Cloud-Fog-Edge Collaborative Framework. , 2020, , .		1
81	Multi-facilities-based road network analysis for flood hazard management. Journal of Spatial Science, 2021, 66, 113-141.	1.5	1
82	Advanced Bayesian Network Models with Fuzzy Extension. Studies in Computational Intelligence, 2020, , 101-113.	0.9	1
83	Short-Term Load Forecasting: An Intelligent Approach Based on Recurrent Neural Network. Advances in Intelligent Systems and Computing, 2021, , 52-62.	0.6	1
84	Measuring Domain Knowledge for Early Prediction of Student Performance: A Semantic Approach. , 2020, , .		1
85	Statistical and Machine Learning Models for Remote Sensing Data Mining—Recent Advancements. Remote Sensing, 2022, 14, 1906.	4.0	1
86	MANTRA: Semantic Mobility Knowledge Analytics Framework for Trajectory Annotation. , 2022, , .		1
87	Innovative software systems for managing the impact of the COVIDâ€19 pandemic. Software - Practice and Experience, 2022, 52, 821-823.	3.6	0
88	Multi-objective Based Road-Link Grading for Health-Care Access During Flood Hazard Management. Lecture Notes in Computer Science, 2018, , 277-293.	1.3	0
89	Spatial Bayesian Network. Studies in Computational Intelligence, 2020, , 53-79.	0.9	0
90	Spatial Time Series Prediction Using Advanced BN Models—An Application Perspective. Studies in Computational Intelligence, 2020, , 125-136.	0.9	0

#	Article	IF	CITATIONS
91	Bayesian Network with Residual Correction Mechanism. Studies in Computational Intelligence, 2020, , 23-52.	0.9	0
92	Semantic Bayesian Network. Studies in Computational Intelligence, 2020, , 81-99.	0.9	0
93	Summary and Future Research. Studies in Computational Intelligence, 2020, , 137-142.	0.9	0