Pieter Simoens

List of Publications by Year
in descending order

73	1,772	394286 19	302012 39
papers	citations	h-index	g-index

76	76	76	1906
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Group size and resource fractality drive multimodal search strategies: A quantitative analysis on group foraging. Physica A: Statistical Mechanics and Its Applications, 2022, 590, 126702.	1.2	5
2	Iterative neural networks for adaptive inference on resource-constrained devices. Neural Computing and Applications, 2022, 34, 10321-10336.	3.2	6
3	Automated training of location-specific edge models for traffic counting. Computers and Electrical Engineering, 2022, 99, 107763.	3.0	3
4	Multi-branch Neural Networks for Video Anomaly Detection in Adverse Lighting and Weather Conditions. , 2022, , .		8
5	The value of measuring uncertainty in neural networks in dermoscopy. Journal of the American Academy of Dermatology, 2022, , .	0.6	0
6	Foraging behaviour and patch size distribution jointly determine population dynamics in fragmented landscapes. Journal of the Royal Society Interface, 2022, 19, .	1.5	2
7	Leveraging the Bhattacharyya coefficient for uncertainty quantification in deep neural networks. Neural Computing and Applications, 2021, 33, 10259-10275.	3.2	9
8	Decoupled appearance and motion learning for efficient anomaly detection in surveillance video. Computer Vision and Image Understanding, 2021, 210, 103249.	3.0	22
9	Data-Efficient Sensor Upgrade Path Using Knowledge Distillation. Sensors, 2021, 21, 6523.	2.1	4
10	Resource ephemerality influences effectiveness of altruistic behavior in collective foraging. Swarm Intelligence, 2021, 15, 427-457.	1.3	1
11	ChronoPilot â€" Modulating Time Perception. , 2021, , .		8
12	Training binary neural networks with knowledge transfer. Neurocomputing, 2020, 396, 534-541.	3.5	12
13	An Artificial Intelligence-Based Collaboration Approach in Industrial IoT Manufacturing: Key Concepts, Architectural Extensions and Potential Applications. Sensors, 2020, 20, 5480.	2.1	63
14	Adaptive Foraging in Dynamic Environments Using Scale-Free Interaction Networks. Frontiers in Robotics and AI, 2020, 7, 86.	2.0	7
15	Learning robots to grasp by demonstration. Robotics and Autonomous Systems, 2020, 127, 103474.	3.0	21
16	Hybrid foraging in patchy environments using spatial memory. Journal of the Royal Society Interface, 2020, 17, 20200026.	1.5	23
17	Facilitating the Analysis of COVID-19 Literature Through a Knowledge Graph. Lecture Notes in Computer Science, 2020, , 344-357.	1.0	14
18	Collective Decision-Making on Triadic Graphs. Springer Proceedings in Complexity, 2020, , 119-130.	0.2	4

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19	Construction Task Allocation Through the Collective Perception of a Dynamic Environment. Lecture Notes in Computer Science, 2020, , 82-95.	1.0	7
20	Action Graphs for Performing Goal Recognition Design on Human-Inhabited Environments. Sensors, 2019, 19, 2741.	2.1	2
21	Scale-Free Features in Collective Robot Foraging. Applied Sciences (Switzerland), 2019, 9, 2667.	1.3	9
22	Asynchronous Spiking Neurons, the Natural Key to Exploit Temporal Sparsity. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2019, 9, 668-678.	2.7	15
23	Robot Assistance in Dynamic Smart Environmentsâ€"A Hierarchical Continual Planning in the Now Framework. Sensors, 2019, 19, 4856.	2.1	7
24	Conversion of Synchronous Artificial Neural Network to Asynchronous Spiking Neural Network using sigma-delta quantization. , 2019, , .		17
25	Coherent collective behaviour emerging from decentralised balancing of social feedback and noise. Swarm Intelligence, 2019, 13, 321-345.	1.3	25
26	Collective sampling of environmental features under limited sampling budget. Journal of Computational Science, 2019, 31, 95-110.	1.5	3
27	Local ant system for allocating robot swarms to time-constrained tasks. Journal of Computational Science, 2019, 31, 33-44.	1.5	18
28	The Neglected Pieces of Designing Collective Decision-Making Processes. Frontiers in Robotics and AI, 2019, 6, 16.	2.0	12
29	Pro-active positioning of a social robot intervening upon behavioral disturbances of persons with dementia in a smart nursing home. Cognitive Systems Research, 2019, 57, 160-174.	1.9	10
30	Multi-fidelity deep neural networks for adaptive inference in the internet of multimedia things. Future Generation Computer Systems, 2019, 97, 355-360.	4.9	7
31	A tale of three systems: Case studies on the application of architectural tactics for cyber-foraging. Future Generation Computer Systems, 2019, 96, 119-147.	4.9	3
32	Applying Scale-Invariant Dynamics to Improve Consensus Achievement of Agents in Motion. Advances in Intelligent Systems and Computing, 2019, , 344-348.	0.5	0
33	On the Feasibility of Using Current Data Centre Infrastructure for Latency-sensitive Applications. IEEE Transactions on Cloud Computing, 2018, , 1-1.	3.1	2
34	The Internet of Robotic Things. International Journal of Advanced Robotic Systems, 2018, 15, 172988141875942.	1.3	152
35	DIANNE: a modular framework for designing, training and deploying deep neural networks on heterogeneous distributed infrastructure. Journal of Systems and Software, 2018, 141, 52-65.	3.3	17
36	The crowd as a cameraman: on-stage display of crowdsourced mobile video at large-scale events. Multimedia Tools and Applications, 2018, 77, 597-629.	2.6	2

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37	The Impact of Interaction Models on the Coherence of Collective Decision-Making: A Case Study with Simulated Locusts. Lecture Notes in Computer Science, 2018, , 252-263.	1.0	9
38	Docker Layer Placement for On-Demand Provisioning of Services on Edge Clouds. IEEE Transactions on Network and Service Management, 2018, 15, 1161-1174.	3.2	25
39	Collective LÃ©vy Walk for Efficient Exploration in Unknown Environments. Lecture Notes in Computer Science, 2018, , 260-264.	1.0	6
40	The cascading neural network: building the Internet of Smart Things. Knowledge and Information Systems, 2017, 52, 791-814.	2.1	39
41	Service-Centric Networking for Distributed Heterogeneous Clouds. , 2017, 55, 208-215.		10
42	Interoperability for Industrial Cyber-Physical Systems: An Approach for Legacy Systems. IEEE Transactions on Industrial Informatics, 2017, 13, 3370-3378.	7.2	133
43	Scale invariance in natural and artificial collective systems: a review. Journal of the Royal Society Interface, 2017, 14, 20170662.	1.5	46
44	Architecture for incorporating Internet-of-Things sensors and actuators into robot task planning in dynamic environments. , 2017, , .		3
45	Sensor fusion for robot control through deep reinforcement learning. , 2017, , .		15
46	Internet of Robotic Things: Context-Aware and Personalized Interventions of Assistive Social Robots (Short Paper). , 2016, , .		21
47	Distributed Neural Networks for Internet of Things: The Big-Little Approach. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2016, , 484-492.	0.2	15
48	Dynamic auto-scaling and scheduling of deadline constrained service workloads on IaaS clouds. Journal of Systems and Software, 2016, 118, 101-114.	3.3	30
49	Multi-fidelity matryoshka neural networks for constrained IoT devices. , 2016, , .		0
50	Mobile device power models for energy efficient dynamic offloading at runtime. Journal of Systems and Software, 2016, 113, 173-187.	3.3	33
51	Middleware Platform for Distributed Applications Incorporating Robots, Sensors and the Cloud. , 2016, , .		9
52	Edge Analytics in the Internet of Things. IEEE Pervasive Computing, 2015, 14, 24-31.	1.1	351
53	Discrete-event simulation for efficient and stable resource allocation in collaborative mobile cloudlets. Simulation Modelling Practice and Theory, 2015, 50, 109-129.	2.2	28
54	Platform for real-time subjective assessment of interactive multimedia applications. Multimedia Tools and Applications, 2014, 72, 749.	2.6	2

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55	Adaptive deployment and configuration for mobile augmented reality in the cloudlet. Journal of Network and Computer Applications, 2014, 41, 206-216.	5.8	38
56	Bandwidth efficient adaptive forward error correction mechanism with feedback channel. Journal of Communications and Networks, 2014, 16, 322-334.	1.8	12
57	User subscription-based resource management for Desktop-as-a-Service platforms. Journal of Supercomputing, 2014, 69, 412-428.	2.4	5
58	Network latency hiding in thin client systems through server-centric speculative display updating. Journal of Network and Computer Applications, 2014, 41, 228-239.	5.8	1
59	Leveraging Cloudlets for Immersive Collaborative Applications. IEEE Pervasive Computing, 2013, 12, 30-38.	1.1	49
60	Lowering the barriers to large-scale mobile crowdsensing. , 2013, , .		84
61	Adaptive Application Configuration and Distribution in Mobile Cloudlet Middleware. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2013, , 178-191.	0.2	4
62	Cross-layer reduction of wireless network card idle time to optimize energy consumption of pull thin client protocols. Journal of Communications and Networks, 2012, 14, 75-90.	1.8	1
63	Optimized mobile thin clients through a MPEG-4 BiFS semantic remote display framework. Multimedia Tools and Applications, 2012, 61, 447-470.	2.6	2
64	Efficient resource management for virtual desktop cloud computing. Journal of Supercomputing, 2012, 62, 741-767.	2.4	38
65	Automatic fine-grained area detection for thin client systems. Journal of Network and Computer Applications, 2012, 35, 1620-1632.	5.8	5
66	AIOLOS: Middleware for improving mobile application performance through cyber foraging. Journal of Systems and Software, 2012, 85, 2629-2639.	3.3	73
67	Dynamic deployment and quality adaptation for mobile augmented reality applications. Journal of Systems and Software, 2011, 84, 1871-1882.	3.3	33
68	Remote Display Solutions for Mobile Cloud Computing. Computer, 2011, 44, 46-53.	1.2	60
69	Power efficiency of thin clients. European Transactions on Telecommunications, 2010, 21, 479-490.	1.2	12
70	Cross-Layer Optimization of Radio Sleep Intervals to Increase Thin Client Energy Efficiency. IEEE Communications Letters, 2010, 14, 1095-1097.	2.5	9
71	Energy Efficiency in Thin Client Solutions. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2010, , 109-116.	0.2	5
72	An autonomic architecture for optimizing QoE in multimedia access networks. Computer Networks, 2009, 53, 1587-1602.	3.2	41

#	Article	IF	Citations
73	Self management of a mobile thin client service. , 2009, , .		0