Ren-Hung Hwang

List of Publications by Year
in descending order

167 papers	1,810 citations	471371 17 h-index	360920 35 g-index
168 all docs	168 docs citations	168 times ranked	1474 citing authors

#	Article	IF	Citations
1	Security and Privacy for 6G: A Survey on Prospective Technologies and Challenges. IEEE Communications Surveys and Tutorials, 2021, 23, 2384-2428.	24.8	140
2	An Unsupervised Deep Learning Model for Early Network Traffic Anomaly Detection. IEEE Access, 2020, 8, 30387-30399.	2.6	117
3	A Novel Time-Obfuscated Algorithm for Trajectory Privacy Protection. IEEE Transactions on Services Computing, 2014, 7, 126-139.	3.2	110
4	An LSTM-Based Deep Learning Approach for Classifying Malicious Traffic at the Packet Level. Applied Sciences (Switzerland), 2019, 9, 3414.	1.3	86
5	Development and evaluation of a Web 2.0 annotation system as a learning tool in an e-learning environment. Computers and Education, 2012, 58, 1094-1105.	5.1	69
6	An effective taxi recommender system based on a spatio-temporal factor analysis model. Information Sciences, 2015, 314, 28-40.	4.0	63
7	Energy Depletion Attacks in Low Power Wireless Networks. IEEE Access, 2019, 7, 51915-51932.	2.6	49
8	MDP routing in ATM networks using virtual path concept. , 0, , .		47
9	A buffer-aware HTTP live streaming approach for SDN-enabled 5G wireless networks. IEEE Network, 2015, 29, 49-55.	4.9	42
10	Optimizing Social Welfare of Live Video Streaming Services in Mobile Edge Computing. IEEE Transactions on Mobile Computing, 2020, 19, 922-934.	3.9	38
11	Seamless session mobility scheme in heterogeneous wireless networks. International Journal of Communication Systems, 2011, 24, 789-809.	1.6	37
12	Multicast routing with multiple QoS constraints in ATM networks. Information Sciences, 2000, 124, 29-57.	4.0	35
13	Cross-layer design vehicle-aided handover scheme in VANETs. Wireless Communications and Mobile Computing, 2011, 11, 916-928.	0.8	34
14	Cost Optimization of Elasticity Cloud Resource Subscription Policy. IEEE Transactions on Services Computing, 2014, 7, 561-574.	3.2	33
15	P2P File Sharing System over MANET based on Swarm Intelligence: A Cross-Layer Design. , 2007, , .		31
16	Enhancing Misbehavior Detection in 5G Vehicle-to-Vehicle Communications. IEEE Transactions on Vehicular Technology, 2020, 69, 9417-9430.	3.9	31
17	MDP routing for multi-rate loss networks. Computer Networks, 2000, 34, 241-261.	3.2	29
18	SSIP: Split a SIP session over multiple devices. Computer Standards and Interfaces, 2007, 29, 531-545.	3.8	28

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19	A Distributed Scheduling Algorithm for IEEE 802.15.4e Wireless Sensor Networks. Computer Standards and Interfaces, 2017, 52, 63-70.	3.8	24
20	Performance Analysis for Hierarchical Multirate Loss Networks. IEEE/ACM Transactions on Networking, 2004, 12, 187-199.	2.6	20
21	LLR routing in homogeneous VP-based ATM networks. , 0, , .		19
22	On-call processing delay in high speed networks. IEEE/ACM Transactions on Networking, 1995, 3, 628-639.	2.6	19
23	Blockchain-Based Privacy-Preserving and Sustainable Data Query Service Over 5G-VANETs. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 15909-15921.	4.7	19
24	Efficient hierarchical QoS routing in ATM networks. Computer Communications, 2001, 24, 1648-1660.	3.1	17
25	A reliability enhancement design under the flash translation layer for MLC-based flash-memory storage systems. Transactions on Embedded Computing Systems, 2013, 13, 1-28.	2.1	17
26	Adaptive multicast routing in single rate loss networks. , 0, , .		16
27	A novel efficient power-saving MAC protocol for multi-hop MANETs. International Journal of Communication Systems, 2013, 26, 34-55.	1.6	16
28	Toward Optimal Resource Allocation of Virtualized Network Functions for Hierarchical Datacenters. IEEE Transactions on Network and Service Management, 2018, 15, 1532-1544.	3.2	16
29	Controllable Path Planning and Traffic Scheduling for Emergency Services in the Internet of Vehicles. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 12399-12413.	4.7	16
30	Cross-layer design of P2P file sharing over mobile ad hoc networks. Telecommunication Systems, 2009, 42, 47-61.	1.6	15
31	MECPASS: Distributed Denial of Service Defense Architecture for Mobile Networks. IEEE Network, 2018, 32, 118-124.	4.9	15
32	Combinatorial clock auction for live video streaming in mobile edge computing. , 2018, , .		15
33	Mobile IPv6-based ad hoc networks: its development and application. IEEE Journal on Selected Areas in Communications, 2005, 23, 2161-2171.	9.7	14
34	SmSCTP: SIP-Based MSCTP Scheme for Session Mobility over WLAN/3G Heterogeneous Networks. , 2007, , .		13
35	A QoS-aware streaming service over fog computing infrastructures. , 2016, , .		13
36	Physiological signals anticipatory computing for individual emotional state and creativity thinking. Computers in Human Behavior, 2019, 101, 450-456.	5.1	13

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37	Efficient OVSF code assignment and reassignment strategies in UMTS. IEEE Transactions on Mobile Computing, 2006, 5, 769-783.	3.9	12
38	Deep Reinforcement Learning for MEC Streaming with Joint User Association and Resource Management. , 2020, , .		12
39	An Efficient Adaptive Grouping for Single Code Assignment in WCDMA Mobile Networks. Wireless Personal Communications, 2006, 39, 41-61.	1.8	11
40	UbiPhone: Human-Centered Ubiquitous Phone System. IEEE Pervasive Computing, 2009, 8, 40-47.	1.1	11
41	SocialHide: A generic distributed framework for location privacy protection. Journal of Network and Computer Applications, 2016, 76, 87-100.	5.8	11
42	Detecting IoT Malicious Traffic Based on Autoencoder and Convolutional Neural Network. , 2019, , .		11
43	Live Video Streaming with Joint User Association and Caching Placement in Mobile Edge Computing. , 2020, , .		11
44	Modeling and Minimizing Latency in Three-tier V2X Networks. , 2020, , .		11
45	Machine Learning With Variational AutoEncoder for Imbalanced Datasets in Intrusion Detection. IEEE Access, 2022, 10, 15247-15260.	2.6	11
46	A self-similar super-peer overlay construction scheme for super large-scale P2P applications. Information Systems Frontiers, 2014, 16, 45-58.	4.1	10
47	Mobility management in ubiquitous environments. Personal and Ubiquitous Computing, 2011, 15, 235-251.	1.9	9
48	UbiPaPaGo: Context-aware path planning. Expert Systems With Applications, 2011, 38, 4150-4161.	4.4	9
49	Context-Awareness Handoff Planning in Heterogeneous Wireless Networks. Lecture Notes in Computer Science, 2010, , 430-444.	1.0	9
50	Optimal video placement for hierarchical video-on-demand systems. IEEE Transactions on Broadcasting, 1998, 44, 392-401.	2.5	8
51	<title>Adaptive multicast routing in broadband networks</title>. , 1998, , .		8
52	Fairness in QoS guaranteed networks. , 0, , .		8
53	P2broadcast: a hierarchical clustering live video streaming system for P2P networks. International Journal of Communication Systems, 2006, 19, 619-637.	1.6	8
54	An Adaptive Sensor Data Segments Selection Method for Wearable Health Care Services. Journal of Medical Systems, 2015, 39, 194.	2.2	8

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55	Fast Failover Mechanism for SDN-Enabled Data Centers. , 2016, , .		8
56	Uplink access control for machine-type communications in LTE-A networks. Personal and Ubiquitous Computing, 2016, 20, 851-862.	1.9	8
57	A Comprehensive Real-Time Traffic Map for Geographic Routing in VANETs. Applied Sciences (Switzerland), 2017, 7, 129.	1.3	8
58	Fast optimal video placement algorithms for hierarchical video-on-demand systems. IEEE Transactions on Broadcasting, 2001, 47, 357-366.	2.5	7
59	Global Connectivity for Mobile IPv6-Based Ad Hoc Networks. , 0, , .		7
60	Modeling and analyzing the performance of adaptive hierarchical networks. Information Sciences, 2006, 176, 522-549.	4.0	7
61	Communication framework for vehicle ad hoc network onÂfreeways. Telecommunication Systems, 2012, 50, 243-256.	1.6	7
62	Multi-Array Relative Positioning for Verifying the Truthfulness of V2X Messages. IEEE Communications Letters, 2019, 23, 1704-1707.	2.5	7
63	Dual Pricing Optimization for Live Video Streaming in Mobile Edge Computing With Joint User Association and Resource Management. IEEE Transactions on Mobile Computing, 2023, 22, 858-873.	3.9	7
64	QoS routing algorithms for multiple traffic classes. , 0, , .		7
65	Chinese document image retrieval system based on proportion of black pixel area in a character image. , 0, , .		6
66	A location-aware peer-to-peer overlay network. International Journal of Communication Systems, 2007, 20, 83-102.	1.6	6
67	An energyâ€saving algorithm for cloud resource management using a Kalman filter. International Journal of Communication Systems, 2014, 27, 4078-4091.	1.6	6
68	SocialCloaking: A distributed architecture for K-anonymity location privacy protection. , 2014, , .		6
69	A Distributed Scheduling Algorithm for IEEE 802.15.4e Networks. , 2015, , .		6
70	Physical signal-driven fusion for V2X misbehavior detection. , 2019, , .		6
71	CREME: A toolchain of automatic dataset collection for machine learning in intrusion detection. Journal of Network and Computer Applications, 2021, 193, 103212.	5.8	6
72	Communication and Computation Offloading for 5G V2X: Modeling and Optimization. , 2020, , .		6

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73	Hierarchical QoS routing in ATM networks based on MDP cost function. , 0, , .		5
74	Multipath QoS routing with bandwidth guarantee. , 0, , .		5
75	Context-awareness Handoff Planning in Ubiquitous Network. , 2009, , .		5
76	Context-aware multimedia broadcast and multicast service area planning in 4G networks. Computer Communications, 2015, 64, 33-43.	3.1	5
77	Load Balancing and Routing Mechanism Based on Software Defined Network in Data Centers. , 2016, , .		5
78	QoS-Guaranteed Radio Resource Management in LTE-A Co-Channel Networks with Dual Connectivity. Applied Sciences (Switzerland), 2019, 9, 3018.	1.3	5
79	Optimizing Live Layered Video Multicasting Over LTE With Mobile Edge Computing. IEEE Transactions on Vehicular Technology, 2020, 69, 12072-12084.	3.9	5
80	Context-Aware Path Planning in Ubiquitous Network. Lecture Notes in Computer Science, 2009, , 54-67.	1.0	5
81	Cooperative Adaptive Driving for Platooning Autonomous Self Driving Based on Edge Computing. International Journal of Applied Mathematics and Computer Science, 2019, 29, 213-225.	1.5	5
82	A P2P hierarchical clustering live video streaming system. , 0, , .		4
83	p-MANET: Efficient Power Saving Protocol for Multi-Hop Mobile Ad Hoc Networks. , 0, , .		4
84	SIP-based MIP6-MANET: Design and implementation of mobile IPv6 and SIP-based mobile ad hoc networks*,â€. Computer Communications, 2006, 29, 1226-1240.	3.1	4
85	Peer-to-Peer Video-On-Demand service in NUWeb. International Journal of Ad Hoc and Ubiquitous Computing, 2012, 9, 1.	0.3	4
86	Downlink Scheduling and Resource Allocation in EPON-WiMAX Integrated Networks. , 2012, , .		4
87	Optimization of cloud resource subscription policy. , 2012, , .		4
88	Design of SDN-Enabled Cloud Data Center. , 2015, , .		4
89	An Intelligent Body Posture Analysis Model Using Multi-Sensors for Long-Term Physical Rehabilitation. Journal of Medical Systems, 2017, 41, 71.	2.2	4
90	Detecting and Preventing DDoS Attacks in SDN-Based Data Center Networks. Lecture Notes in Computer Science, 2017, , 50-61.	1.0	4

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91	Building a Taiwan Law Ontology Based on Automatic Legal Definition Extraction. Applied System Innovation, 2018, 1, 22.	2.7	4
92	Improving Learning Achievement in Science Education for Elementary School Students via Blended Learning. International Journal of Online Pedagogy and Course Design, 2019, 9, 44-62.	0.3	4
93	Multicast provision in a differentiated services network. , 0, , .		3
94	Reduced load approximation analysis for fixed hierarchical routing. , 0, , .		3
95	Fair and efficient scheduling for UMTS forward link. International Journal of Communication Systems, 2005, 18, 409-426.	1.6	3
96	Markov-Based OVSF Code Assignment Scheme and Call Admission Control for Wideband-CDMA Communication Systems. Wireless Personal Communications, 2005, 34, 373-394.	1.8	3
97	A scalable overlay framework for internet anycasting service. , 2007, , .		3
98	Querying time indexed information in mobile Ad hoc networks. Ad Hoc Networks, 2007, 5, 1090-1112.	3.4	3
99	An Open Framework for Distributed Context Management in Ubiquitous Environment. , 2009, , .		3
100	Solutions to Multihoming in IPv6 Based on MIPv6 and NEMO. , 2009, , .		3
101	A Scalable Integrated SDN and OpenStack Management System. , 2016, , .		3
102	A QoS Aware Resource Allocation Strategy for Mobile Graphics Rendering With Cloud Support. IEEE Transactions on Circuits and Systems for Video Technology, 2017, 27, 110-124.	5.6	3
103	A Resilient Power Fingerprinting Selection Mechanism of Device Load Recognition for Trusted Industrial Internet of Things. IEEE Transactions on Industrial Informatics, 2018, 14, 3581-3589.	7.2	3
104	StateFit: A Security Framework for SDN Programmable Data Plane Model. , 2018, , .		3
105	A Beamforming Signal-Based Verification Scheme for Data Sharing in 5G Vehicular Networks. IEEE Access, 2020, 8, 211723-211737.	2.6	3
106	Pricing-Based Deep Reinforcement Learning for Live Video Streaming With Joint User Association and Resource Management in Mobile Edge Computing. IEEE Transactions on Wireless Communications, 2022, 21, 4310-4324.	6.1	3
107	Resource Management in LADNs Supporting 5G V2X Communications. , 2020, , .		3
108	Persistent Periodic Uplink Scheduling Algorithm for Massive NB-IoT Devices. Sensors, 2022, 22, 2875.	2.1	3

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109	Routing in ATM networks with multiple classes of QoS. , 0, , .		2
110	Dynamic update of aggregated routing information for hierarchical QoS routing in ATM networks. , 0, , .		2
111	MDP-based dynamic update of aggregated information for hierarchical QoS routing. , 0, , .		2
112	Performance evaluation model for adaptive hierarchical loss networks. , 0, , .		2
113	RPIM-SM: extending PIM-SM for RP relocation. Computer Communications, 2002, 25, 1774-1781.	3.1	2
114	Efficient OVSF codes assignment strategy and management architecture in wideband CDMA. , 0, , .		2
115	MDP-based OVSF code assignment scheme and call admission control for wideband-CDMA communications. , 0, , .		2
116	A location-aware P2P information sharing system in Bluetooth-based mobile ad hoc network. , 0, , .		2
117	Efficient OVSF code assignment and reassignment strategies in UMTS. Computer Communications, 2006, 29, 1538-1551.	3.1	2
118	Discovering timely information in MANETs. Computers and Mathematics With Applications, 2009, 57, 1808-1821.	1.4	2
119	Optimal Key Generation Policies for MANET Security. , 2010, , .		2
120	Editorial: WiMAX integrated communications. IET Communications, 2010, 4, 1037.	1.5	2
121	A Novel Time-Obfuscated Algorithm for Trajectory Privacy. , 2012, , .		2
122	Adaptive loadâ€balancing association handoff approach for increasing utilization and improving GoS in mobile WiMAX networks. Wireless Communications and Mobile Computing, 2012, 12, 1251-1265.	0.8	2
123	Integration of Spatial Reuse and Allocation for Downlink Broadcast in LTE-Advanced and WiMAX Relay Networks. IEEE Transactions on Vehicular Technology, 2015, 64, 5246-5256.	3.9	2
124	Novel QoS guaranteed cell selection schemes in LTE-A heterogeneous networks. , 2017, , .		2
125	Inference of Learning Creative Characteristics by Analysis of EEG Signal. Lecture Notes in Computer Science, 2017, , 425-432.	1.0	2
126	Live MPEG-DASH video streaming cache management with cognitive mobile edge computing. Journal of Ambient Intelligence and Humanized Computing, 2020, , 1.	3.3	2

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127	Innovative Project-Based Learning. Lecture Notes in Computer Science, 2017, , 189-194.	1.0	2
128	Fast video placement algorithms for hierarchical VOD systems. , 0, , .		1
129	Adaptive multicast routing in ATM networks. , 0, , .		1
130	Optimal video placement for hierarchical video-on-demand systems. , 0, , .		1
131	Adaptive crankback schemes for hierarchical QoS routing in ATM networks. Computer Communications, 2002, 25, 534-543.	3.1	1
132	Fair and efficient packet scheduling algorithms for multiple classes of service under QoS guarantee in UMTS. Computer Communications, 2005, 28, 379-392.	3.1	1
133	Energy efficient predictive AMC with adaptive SNR-based power allocation in MIMO radio networks. , 2011, , .		1
134	SSNG: A Self-Similar Super-Peer Overlay Construction Scheme for Super Large-Scale P2P Systems. , 2011, , .		1
135	Downlink packet scheduling and resource allocation in EPON WiMAX hybrid access networks. Eurasip Journal on Wireless Communications and Networking, 2012, 2012, .	1.5	1
136	Open source for networking: Tools and applications [Guest Editorial]. IEEE Network, 2014, 28, 4-5.	4.9	1
137	A Dynamic Power Features Selection Method for Multi-appliance Recognition on Cloud-Based Smart Grid. , 2014, , .		1
138	Downlink resource allocation with cooperative transmission in EPON-WiMAX integrated network. , 2014, , .		1
139	Guest Editorial: Open Source for Networking: Protocol Stacks. IEEE Network, 2014, 28, 2-5.	4.9	1
140	Analysis of Influential Factors in Secondary PM2.5 by K-Medoids and Correlation Coefficient. , 2017, , .		1
141	Using ANN to Analyze the Correlation Between Tourism-Related Hot Words and Tourist Numbers: A Case Study in Japan. , 2017, , .		1
142	Ubiquitous Phone System. Lecture Notes in Computer Science, 2008, , 201-215.	1.0	1
143	Offloading Optimization with Delay Constraint in the 3-tier Federated Cloud, Edge, and Fog Systems. , 2021, , .		1
144	QoS allocation of multicast connections in ATM. , 0, , .		0

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145	Scheduling policies for an VOD system over CATV networks. , 0, , .		0
146	On LLR routing in circuit-switched networks. , 0, , .		0
147	Adaptive multicast routing in multirate loss networks. Telecommunication Systems, 1999, 12, 283-313.	1.6	0
148	PROMS: a PRO-active Monitoring System for SS7 networks. International Journal of Network Management, 2000, 10, 17-27.	1.4	0
149	Reducing crankback overhead in hierarchical routing in ATM networks. , 0, , .		0
150	A multicast framework for multimedia applications. , 0, , .		0
151	Automatic and structure-preserved ontology mapping based on exponential random graph model. , 2008, , .		0
152	MDP-Based CAC for Two-Dimension Spreading VSF-OFCDM in 4G Cellular Communications. , 2009, , .		0
153	Swarm intelligence-based anycast routing protocol in ubiquitous networks. Wireless Communications and Mobile Computing, 2009, 10, n/a-n/a.	0.8	0
154	Peer-to-Peer Video-on-Demand Service in NuWeb. , 2009, , .		0
155	ENERGY EFFICIENCY POWER CONTROL OF CELL BREATHING IN EPON-WIMAX HYBRID ACCESS NETWORK. Journal of Interconnection Networks, 2012, 13, 1250012.	0.6	0
156	Optimal bandwidth adaptation for layered video multicasting in IEEE 802.11 WLANs. , 2012, , .		0
157	Load Balancing with Cell Breathing in EPON-WiMAX Integrated Network. , 2012, , .		0
158	Load balancing with cell breathing to maximize the system reward in mobile WiMAX. , 2013, , .		0
159	OPTIMAL RESOURCE ALLOCATION FOR LAYERED VIDEO MULTICASTING IN WIMAX. Journal of Computer Science, 2014, 10, 2429-2441.	0.5	0
160	Routine Based User Classification. , 2014, , .		0
161	Analysis of Swarm Behavior of Users' GPS Data Based on Boids Model. , 2014, , .		0
162	An effective taxi recommender system based on a spatiotemporal factor analysis model. , 2014, , .		0

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163	Optimal Sink Placement in M2M over LTE Networks. , 2015, , .		0
164	A Survey and Implementation on Neural Network Visualization. , 2018, , .		0
165	Applying Classification to Rainfall Nowcasting with Topographical Awareness. , 2018, , .		0
166	Screw Slot Quality Inspection System Based on Tactile Network. ACM Transactions on Internet Technology, 2021, 21, 1-17.	3.0	0
167	Satisfaction Analysis for Agricultural Worker Digital Course Learning Platform. Lecture Notes in Computer Science, 2017, , 9-18.	1.0	0