Prof. Wang Wenyong

International Institute for Next Generation Internet

Office: N401

Tel: +853-68679217

E-mail: wywang@must.edu.mo



Academic Qualification:

Ph.D. in Information and Communication Engineering, University of Electronic Science and Technology of China, 2011.

M.S. in Institute of Microcomputer, University of Electronic Science and Technology of China, 1991. **B.S. in** Computer System Structure and Software Engineering, Beijing University of Aeronautics and Astronautics, China, 1988.

Teaching Area

Computer Network

Research Area

Computer Network

Working Experience

2020.11 - Present	Professor/Doctoral Supervisor, International Institute for Next Generation Internet, Macau University of Science and Technology, Macau.
2020.06 - Present	Director of Sichuan Engineering Research Center for Cloud and Network Superfusion
2011.09 - Present	Professor/Doctoral Supervisor, University of Electronic Science and Technology of China
2006.06 - Present	Professor, University of Electronic Science and Technology of China

Academic Publication (selected)

- [1] Rajesh Kumar; Abdullah Aman Khan; Jay Kumar; Zakria; Noorbakhsh Amiri Golilarz; Simin Zhang; Yang Ting; Chengyu Zheng; **Wenyong Wang**, Blockchain Federated Learning and Deep Learning Models for COVID-19 Detection Using CT Imaging.IEEE Sensors Journal, 2021,21(14).
- [2] S. Zou, W. Wang, W. Ni, L. Wang and Y. L. Tang. Efficient Orchestration of Virtualization Resource in RAN Based on Chemical Reaction Optimization and Q-learning. IEEE Internet of Things Journal, doi: 10.1109/JIOT.2021.3098331.
- [3] Zhou, K., Wang, W*., Hu, F., Deng, K. Application of Improved Asynchronous Advantage Actor Critic Reinforcement Learning Model on Anomaly Detection. Entropy, 2021,23,274.
- [4] Kumar, R., Wang, W.Y., Kumar, J., Yang, T., Ali, I.. An integration of block chain and AI for secure data sharing and detection of CT images for the hospitals. Computerized Medical Imaging and Graphics, 2021, 87, 101812.

- [5] Zhou, Kun; Wang, Wenyong; Hu, Teng; Deng, Kai. Time Series Forecasting and Classification Models Based on Recurrent with Attention Mechanism and Generative Adversarial Networks. IEEE Sensors Journal, 2020, 24:7211.
- [6] XiangY, HuangS, LiM, LiJ, WangW*. Rear-End Collision Avoidance-Based on Multi-Channel Detection. IEEE Transactions on Intelligent Transportation Systems, 2020, 21(8):3525-3535.
- [7] Huang, L., Ran, J., Wang, W., Yang, T., Xiang, Y.. A multi-channel anomaly detection method with feature selection and multi-scale analysis. Computer Networks, 2020, 185, 107645.
- [8] Zhou, K., Wang, W., Wu, C., Hu, T.. Practical evaluation of encrypted traffic classification based on a combined method of entropy estimation and neural networks. ETRI Journal, 2020, 42(3).
- [9] LiJ,XiangY,FangJ,WangW*,PiY. Research on multiple sensors vehicle detection with EMD-based denoising. IEEE Internet of Things Journal,2019,6(4):6262-6270.

EMD for rain fall

prediction. Applied Soft Computing, 2018, 73.

[11] Xiang,Y.,Ran,J.,Huang,L.,Yang,C.,Wang,W..(2019).A Traffic Anomaly Detection Method based on Multi-scale Decomposition and Multi-Channel Detector. 2019 ACM/IEEE Symposium on Architectures for Networking and Communications Systems (ANCS). ACM 2019



training set for Support Vector Machine. Knowledge-Based Systems, 2017, 116(Jan. 15):58-73.

[20] 2016,S1:48-52.

[21]

,2017,44(11):59-63.

[22]

,2016,014(002):270-275,281.

[23]

044(0z1):48-52.

- [24] Xiang, Y., Wang, X., He, L., **Wang**, W., Moran, W.. Spatial-temporal analysis of environmental data of north Beijing district using Hilbert-Huang transform. PLoS One, 2016, 11(12), e0167662.
- [25] LiuC, WangW*, TuG, et al. A new Centroid-Based Classification model for text categorization. Knowledge-Based Systems, 2017, 136(Nov.15):15-26.
- [26] Xiang,Y.,Xuan,Z.,Zhang,J.,Yang,T.,Wang,W.. Design and implementation of intelligent field monitoring and irrigation system for Radix Ophiopogonis. Journal of Diabetes Science & Technology,2015,8(6):1241-1242.
- [27] Zhang, J., Tang, Y., Jun, Z., **Wang, W**.. A layer-based algorithm for the construction of connected dominating set in WSNs. International Journal of Autonomous Adaptive Communications Systems, 2015, 8(2/3):320-331.
- [28] 2014,43(001):82-87.

[29] ,2013,S1:268-275.

- [30] Zou,S.,Wang,W., Wang,W.. A routing algorithm on delay-tolerant of wireless sensor network based on the node selfishness. EURASIP Journal on Wireless Communications Networking,2013.
- [31] Tang,Y.,Zhang,J.,Wang,W.,Xiang,Y.. Forwarding set based distributed algorithm for connected dominating set in WSN. Sensor Letters,2012,10(8):1918-1924.
- [32] Jun, Zhang, Yu, Xiang, Xiaojuan, Liu, **Wenyong, Wang**, et al. An energy-efficient distributed algorithm for virtual backbone construction with cellular structure in WSN. International Journal of Distributed Sensor Networks, 2012, 8(12).
- [33] * ,2010,38(10):2441-2446.

Professional Society Membership