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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.

[10] XiangY,GouL,HeL,XiaS,**WangW***.A SVR-ANN combined model based on ensemble 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.

[12] 郑成渝, 焦博, 王军, 胡力卫, 唐勇, **汪文勇**. 基于可计算网络的SDN视频总线系统架构研究. 通信学报,2018,039(0z1):271-277.

[13] Li,L.,Wu,S.,Huang,L.,**Wang,W**.. Research on modeling for network security policy confliction based on network topology. 2017 14th International Computer Conference on Wavelet Active Media Technology and Information Processing (ICCWAMTIP). IEEE,2017.

[14] **汪文勇**, 周琨. 设置专门的安全运行中心十分必要网络安全是一件专门和专业的事. 中国教育网络,2018,000(005):54-55.

[15] 唐勇, 王卫振, **汪文勇**, 徐宾伟. SDN与传统IP网络互联架构的设计与实现. 计算机工程与科学,2017,v.39,No.276(12):54-60.

[16] Liu,C.,**Wang,W**.,Tu,G.,Xiang,Y.,Wang,S.,Lv,F.. A new centroid-based classification model for text categorization. Knowledge-Based Systems,2017,136(Nov.15):15-26.

[17] Liu,C.,**Wang,W**.,Zhao,Q.,Shen,X.,Konan,M..A new feature selection method based on a validity index of feature subset. Pattern Recognition Letters,2017,92(Jun.1):1-8.

[18] Liu,C.,**Wang,W**.,Konan,M.,Wang,S.,Zhang,X..A new validity index of feature subset for evaluating the dimensionality reduction algorithms. Knowledge-Based Systems,2017,121(Apr.1):83-98.

[19] Chuan,Liu,**Wenyong,Wang**,Meng,Wang,et al..An efficient instance selection algorithm to reconstruct

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

[20] 唐勇, 王卫振, **汪文勇**. SDN中资源预留系统的设计. 华中科技大学学报（自然科学版）, 2016,S1:48-52.

[21] 向渝, 羊刚, 王伟, **汪文勇**. 基于网络演算的确定性以太网性能评估. 华中科技大学学报（自然科学版）,2017,44(11):59-63.

[22] 陈君, 周达夫, 王飞, 张骏, **汪文勇**. 麦冬田间环境监测和自动灌溉系统设计与实现. 太赫兹科学与电子信息学报,2016,014(002):270-275,281.

[23] 唐勇，王卫振，**汪文勇**.SDN中资源预留系统的设计.华中科技大学学报（自然科学版）, 2016, 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,etal.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] 邹赛, **汪文勇**, 唐勇, 张骏. 在动态水环境中基于熵的无线传感器网络路由算法. 电子科技大学学报, 2014,43(001):82-87.

[29] 邹赛, **汪文勇**, 唐勇, 张骏. 异构传感器网络中汇聚节点位置优化路由算法. 通信学报,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] **汪文勇***, 向渝, 董传坤, 杨挺, 唐勇. 用马尔科夫模型优化分布式最小连通支配集算法. 电子学报,2010,38(10):2441-2446.

Professional Society Membership

Member of ACM/IEEE/CAAI, Senior Member of CCF