ICCC2023 TECHNICAL PROGRAM

Room 1

Time: 10:40-12:10, 11 Aug, 2023
Session：WCS1
Session Chair: Li Wang

10:40 Three-Dimensional Geometry-based Stochastic Model for Sub-Terahertz Air-to-Air UAV-MIMO channels

Kai Zhang, Hua Wang and Changming Zhang (Zhejiang Lab, China); Xianbin Yu (Zhejiang University, China); Yuan Yuan Dong (Zhejiang Lab, China)

10:58 Strategic Planning for large-scale Deployment of a Geo-positioned Smart Metering Network

Esteban Inga and Miguel Campaña (Universidad Politécnica Salesiana, Ecuador)

11:16 Minimizing Real-time Estimation Error in IoT Networks via Noisy Past Observations

Xinbei Li and Xiaoqi Qin (Beijing University of Posts and Telecommunications, China); Zijing Wang (University of Oxford, United Kingdom (Great Britain)); Yixuan Li and Nan Ma (Beijing University of Posts and Telecommunications, China); Ping Zhang (WTI-BUPT, China)

11:34 DFT-Based Channel Estimation with Iterative Denoising for OFDM-IM System

Zhi Liu, Rugui Yao, Yongjia Zhu, Ye Fan and Xiaoya Zuo (Northwestern Polytechnical University, China)

11:52 Covert Transmission of RIS-Aided Communication Networks in the presence of Imperfect CSI and Hardware Impairments

Wei Zhang and Liang Yang (Hunan University, China)

Room 1

Time: 13:30-15:30, 11 Aug, 2023
Session：WCS2
Session Chair: Hangguan Shan

13:30 Data-Driven Non-orthogonal Random Access for Wireless IoT Networks (Invited talk)

Lin Cai (Illinois Institute of Technology, USA)

14:00 RIS-Aided Communication with Compressed Sensing Channel Estimation:

Analysis and Discrete Phase Shifts Design

Xuying Chen and Wei Chen (Beijing Jiaotong University, China); Lei Cao (China Academy of Information and Communications Technology, China); Ning Wang (Zhengzhou University, China); Bo Ai (Beijing Jiaotong University, China)

14:18 Multiuser MIMO Detection Via the EM Algorithm

Bowen Wang, Shan Yang, Xiaoming She, Jianxiu Wang and Peng Chen (China Telecom Research Institute, China)

14:36 Metric Learning-Based Timing Synchronization by Using Lightweight Neural Network

Chaojin Qing, Na Yang, Shuhai Tang, Chuangui Rao and Jiafan Wang (Xihua University, China); Hui Lin (Hangtiankaite Electromechanical Technology Co. Ltd, China)

14:54 Impact of Device Specifications on VLC Path Loss and System Performance: An Empirical Study

Shuo Liu and Pan Tang (Beijing University of Posts and Telecommunications, China); Yu Tong, Yue Yin, Linchao Li and Anrui Niu (BUPT, China); Liang Xia (China Mobile Research Institute, China); Jianhua Zhang (Beijing University of Posts and Telecommunications, China)

15:12 Doppler Spread Analysis for Reducing High-Mobility Massive MIMO V2V Channel Time-Variation

Zeyu Yan and Weile Zhang (Xi'an Jiaotong University, China)

Room 1

Time: 16:00-17:30, 11 Aug, 2023
Session：WCS3
Session Chair: Wen Wu

16:00 High-Throughput Polar Code SCL Decoding with Dynamically Configurable Pipeline Architecture

Longjian Ye, Xiongfei Zhai, Zifeng Zeng and Guojun Han (Guangdong University of Technology, China)

16:18 Full-Duplex Relay for Ultraviolet Communications Using Photomultiplier Tube Receivers

Zhifeng Wang and Renzhi Yuan (Beijing University of Posts and Telecommunications, China); Mugen Peng (Beijing University of posts & Telecommunications, China); Siming Wang, Xinyi Chu and Shijie Di (Beijing University of Posts and Telecommunications, China)

16:36 Deep Learning-based Joint Transmit and

Reflective Beamforming Design for IRS-Aided MISO Multiuser Systems Under Statistical CSI

Wenwen Guan and Jiawen Tian (Jinan University, China); Theodoros Tsiftsis (University of Thessaly, Greece); Cunhua Pan (Southeast University, China)

16:54 Channel Estimation for Extremely Large-Scale Massive MIMO Systems in Hybrid-Field Channel

Xingxing Peng (Sun Yat-Sen University, China); Lei Zhao and Yuan Jiang (Sun Yat-sen University, China); Jingjing Liu (Sun Yat-Sen University, China); Weidan Li (GuangDong Communications and Networks Institute, China)

17:12 A Space-Time Non-Stationary and Consistent Model for 6G Multi-UAV Cooperative Channels

Ziwei Huang (Peking University, China); Lu Bai and Lizhen Cui (Shandong University, China); Tao Feng (PLA Academy of Military Sciences, China)

Room 2

Time: 10:40-12:10, 11 Aug, 2023
Session：MWN1
Session Chair: Yun Lin

10:40 Secure Downlink Transmission with IRS-assisted Eavesdropper and Legitimate User

Bing Wang, Huici Wu, Xiaofeng Tao and Jin Xu (Beijing University of Posts and Telecommunications, China)

10:58 Random Location Poisoning Backdoor Attack Against Automatic Modulation Classification in Wireless Networks

Zixin Li, Hang Jiang and Sicheng Zhang (Harbin Engineering University, China); Wei Xiang (La Trobe University, Australia); Yun Lin (Harbin Engineering University, China)

11:16 Impact of UAVs Equipped with ADS-B on the Civil Aviation Monitoring System

Yiyang Liao (Nanjing University of Aeronautics and Astronautics, China); Lei Zhang (NUAA, China); Ziye Jia and Chao Dong (Nanjing University of Aeronautics and Astronautics, China); Yifan Zhang (NanJing University of Aeronautics and Astronautics, China); Qihui Wu (Nanjing University of Aeronautics and Astronautics, China); Huiling Hu and Bin Wang (Middle-south Regional Air Traffic Management Bureau of CAAC, China)

11:34 Adversarial Domain Generalization Defense for Automatic Modulation Classification

Sicheng Zhang, Jie Liu and Zhida Bao (Harbin Engineering University, China); Shui Yu (University of Technology Sydney, Australia); Yun Lin (Harbin Engineering University, China)

11:52 A Lightweight Road Crack and Damage Detection Method Using Yolov5s for IoT Applications

Youxiang Huang, Zhengran He and Xiaohu Xu (Nanjing University of Posts and Telecommunications, China); Wenjie Qian (Nanjing Great Information Technology Co. Ltd, China); Feng Shi (Nanjing University of Posts and Telecommunications, China); Zhiyi Lu (Nanjing Great Information Technology Co. Ltd, China); Hong Wan (Nanjing University of Posts and Telecommunications, China); Guoyue Chen (Akita Prefectural University, Japan); Guan Gui (Nanjing University of Posts and Telecommunications, China)

Room 2

Time: 13:30-15:30, 11 Aug, 2023
Session：MWN2
Session Chair: Zhen Gao

13:30 Challenges and Solutions for the Next Generation Crowdsensing Networks (Invited talk)

Zhou Su (Xian Jiaotong University, China)

14:00 Transformer-based Joint Source Channel Coding for Textual Semantic Communication

Shicong Liu (Beijing Institute of Technology & City University of Hong Kong, China); Zhen Gao (Beijing Institute of Technology, China); Gaojie Chen (University of Surrey, United Kingdom (Great Britain)); Yu Su (China Mobile Chengdu Industry Research Institute, China); Lu Peng (China Mobile Institute of Research and Development, China)

14:18 Split Learning in Wireless Networks: A Communication and Computation Adaptive Scheme

Yuzhu Wang (Beijing University of Posts and Telecommunications, China); Kun Guo (East China Normal University, China); Wei Hong (Beijing Xiaomi Mobile Software, China); Qin Mu (Xiaomi Inc, China); Zhongyuan Zhao (Beijing University of Posts and Telecommunications, China)

14:36 Secure Two-Party Computation for Fingerprinting-based Indoor Localization

Xintong Wang and Ying Qiu (Tongji University, China); Jinming Hu (the Third Research Institute of Ministry, China); Lili Cao (Shanghai Aerospace Electronic Technology Institute, China); Yueyue Zhang (Southeast University, China); Yaping Zhu (Tongji University, China)

14:54 Performance Analysis for Configured Active RIS-Aided Communication Systems

Longze Li and Hai-tao Zhao (Nanjing University of Posts and Telecommunications, China); Yiyang Ni (Jiangsu Second Normal University, China); Xu Zhuoran, Wei Xun and Bangning

Xu (Nanjing University of Posts and Telecommunications, China)

15:12 Alarm Association Mining Model Based on Merging Strategy

Hong Zhu (China United Network Communications Group Co. Ltd Nanjing, China); Cheng Deng (China United Network Communications Group Co. Ltd, China); Yu Wang (China United Network Communications Group Co. Ltd Nanjing, China); Yixin Zhao (China United Network Communications Group Co. Ltd, China)

Room 2

Time: 16:00-17:30, 11 Aug, 2023
Session：MWN3
Session Chair: Yatian Li

16:00 Uplink NOMA Semantic Communications: Semantic Reconstruction for SIC

Bingcen Chen, Xiaoming Wang, Dapeng Li and Rui Jiang (Nanjing University of Posts and Telecommunications, China); Youyun Xu (Nanjing University of Posts and Telecommunications & Shanghai Jioatong University, China)

16:18 Power Control in Contention-Based Access for Haptic Communication: A Potential Game Approach

Jiahui Sui, Jie Liu, Yan Wu and Shenqian Yin (Army Engineering University of PLA, China)

16:36 Coverage in Cellular Networks with Cross-tier Interference Coordination for Mobile Users

Chengyao Li and Na Deng (Dalian University of Technology, China); Haichao Wei (Dalian Maritime University, China)

16:54 Channel Estimation with Predictor Antennas in High-Speed Railway

Zhaoming Dai and Jiakang Zheng (Beijing Jiaotong University, China); Jiaxun Li (National University of Defense Technology, China & University of Montreal, Canada); Xinjie Wang (SixFiveFiveTwoNine Institution, China); Jiayi Zhang (Beijing Jiaotong University, China); Bo Ai (Beijing Jiaotong University & State Key Lab of Rail Traffic Control and Safety, China)

17:12 A Joint Scheme on Spectrum Sensing and Access with Partial Observation: A Multi-Agent Deep Reinforcement Learning Approach

Yulong Zhang and Xuanheng Li (Dalian University of Technology, China); Haichuan Ding (Beijing Institute of Technology, China); Yuguang Fang (City University of Hong Kong, Hong Kong)

Room 3

Time: 10:40-12:10, 11 Aug, 2023
Session：AIN1
Session Chair: Rongfei Fan

10:40 Privacy Protection for Federated Learning in OFDM Aided Over-the-Air Computation System

Yujuan Wang, Rongfei Fan and Han Hu (Beijing Institute of Technology, China); Ning Zhang (University of Windsor, Canada)

10:58 Digital Twin-Based 3D Map Management for Edge-Assisted Mobile Augmented Reality

Conghao Zhou (University of Waterloo, Canada); Jie Gao (Carleton University, Canada); Mushu Li (Toronto Metropolitan University, Canada); Nan Cheng (Xidian University, China); Sherman Shen and Weihua Zhuang (University of Waterloo, Canada)

11:16 Channel Estimation Based on An Improved Conditional GAN for MIMO-OFDM Systems

Ming Ye, Cunhua Pan, Yinfei Xu and Ming Jiang (Southeast University, China); Xiao Liang (National Mobile Communication Research Lab., Southeast University, China); Chunguo Li (Southeast University, China)

11:34 Adaptive Digital Twin Server Deployment for Dynamic Edge Networks in IoT System

Hui Zhang (Nanjing University of Posts and Telecommunications, Nanjing, China); Tianxiang Luo and Qianqian Wang (Nanjing University of Posts and Telecommunications, China)

Room 3

Time: 13:30-15:30, 11 Aug, 2023
Session：CEC1
Session Chair: Xiaotian Zhou

13:30 Digital Twins are Driving the Future of Connected and Automated Vehicles (Invited talk)

Qingyang Song (Chongqing University of Posts and Telecommunications, China)

14:00 Wireless-Powered UAV-Assisted MEC: Joint Resource Allocation and Trajectory Optimization

Yue Zhang, Zhenyu Na, Hanhan Ren and Bin Lin (Dalian Maritime University, China)

14:18 Multipath Information Announcement Algorithm for Computing Power Network based on Self-Organizing Map Network

Kaixiang Li, Xing Zhang and Wenbo Wang (Beijing University of Posts and Telecommunications, China)

14:36 Model-heterogeneous Federated Learning

with Partial Model Training

Hongda Wu and Ping Wang (York University, Canada); Aswartha C V Narayan (Amrita University, India)

14:54 Hierarchical Federated Learning for Heterogeneous Features and Distributed Data in IoT Networks

Leyi Wang and Lingya Liu (East China Normal University, China); Yanlin Lu, Chenyu Zhang and Yongqing Zheng (China United Network Communication Co, China); Jing Xu (East China Normal Unievrsity, China)

15:12 Energy Consumption Minimization for Distributed Microservice-Aware Wireless Cellular Networks

Yue Shan (Nanjing University of Posts and Telecommunications, China); Yaru Fu (Hong Kong Metropolitan University, China); Qi Zhu (Nanjing University of Posts and Telecommunications, China)

Room 3

Time: 16:00-17:30, 11 Aug, 2023
Session：IOT1
Session Chair: Zhiqing Tang

16:00 Wireless Powered Backscatter Communications with Spatially Random Tags

Yingting Liu (Northwest Normal University, China); Yinghui Ye (Xi'an University of Posts and Telecommunications, China); Xingwang Li (Henan Polytechnic University, China); Zhongyu Ma (Northwest Normal University, China); Zhiyang Zhou (Lan Zhou Jiaotong University, China)

16:18 Online Container Scheduling for Low-Latency IoT Services in Edge Cluster Upgrade: A Reinforcement Learning Approach

Hanshuai Cui and Zhiqing Tang (Beijing Normal University, China); Jiong Lou (Shanghai Jiao Tong University, China); Weijia Jia (Beijing Normal University, China)

16:36 Joint Optimization of Service Placement and Computation Offloading for Mobile Edge Computing

Huaizhe Liu (Harbin Institute of Technology, China); Zhizongkai Wang, Jiaqi Wu and Lin Gao (Harbin Institute of Technology, Shenzhen, China)

16:54 Energy-Aware Sensor Scheduling and Opportunistic Transmission for State Estimation in Industrial IoT Systems

Zexin Qiao, Ling Lyu and Yanpeng Dai (Dalian Maritime University, China); Nan Cheng (Xidian University, China); Sherman Shen (University of Waterloo, Canada)

17:12 Aging-aware Incentive Mechanism Design for Federated Learning in Industrial Internet of Things

Shuo He and Chu Wang (Zhengzhou University, China); Hui Tian (Beijng University of posts and telecommunications, China); Xiaoheng Jiang, Ruijie Zhu and Mingliang Xu (Zhengzhou University, China)

Room 4

Time: 10:40-12:10, 11 Aug, 2023
Session：SPC1
Session Chair: Liangtian Wan

10:40 RIS Design for CRB Optimization in Source Localization with Electromagnetic Interference

Yuhua Jiang (Tsinghua University, China); Wanmai Yuan (Information Science Academy of CETC, China); Feifei Gao (Tsinghua University, China)

10:58 On the Performance Analysis of Cooperative Active Round-trip Ranging and Passive Hyperbolic Localization for UAV Surveillance

Peixia Lyu, Yue Zhao, Zan Li and Chao Wang (Xidian University, China)

11:16 MM-APS-SCENT: A Robust Parameter Estimation Enabled Target Transmitter Localization Framework

Xudong Li (School of Electronics and Information, Northwestern Polytechnical University, China); Ye Fan, Rugui Yao, Peng Wang, Xiaoya Zuo and Jiayu Wang (Northwestern Polytechnical University, China); Yi Xie (Xian Shiyou University, China)

11:34 A Covariance Absolute Value Detection Algorithm Exploiting Generalized Stochastic Resonance

Hongyu Xu (Sun Yat-Sen University, China); Yuan Jiang and Lei Zhao (Sun Yat-sen University, China); Jingjing Liu (Sun Yat-Sen University, China)

11:52 SRS-based Wideband AoA Estimation Method in 5G New Radio

Keke Hu and Wenxuan Li (Tsinghua University, China); Qianxi Lu (OPPO Standards Research Center, China); Cong Shi (OPPO, China); Bobai Zhao (Beijing Information Science and Technology University, China); Yuan Shen (Tsinghua University, China)

Room 4

Time: 13:30-15:30, 11 Aug, 2023
Session：ISC1
Session Chair: Min Jia

13:30 Edge Computing assisted efficient resource management in Collaborative Satellite and Terrestrial Systems (Invited talk)

Min Jia (Harbin Institute of Technology, China)

14:00 Referring Image Segmentation via Text Guided Multi-Level Interaction

Shuang Qiu and Weijie Wang (Taiyuan University of Technology, China)

14:18 MicEye: Locating Sound Source in 3D with Small-size Microphone Array

Zhaohui Li, Yongmin Zhang, Chengjun Li, Haocheng Zang and Wei Wang (Central South University, China)

14:36 Indoor Human Trajectory Reconstruction via Multi-link mmWave Passive Sensing System

Renqi Chen (Southern University of Science and Technology, China)

14:54 iCar: Multi-modal Learning-Inspired Vehicle Owner Recognition Based on FMCW Radar in Internet of Things

Shuaishuai He and Yu Wang (Northwest University, China); Xueping Du (Sichuan Agriculture University, China); Zhenwen Gui (China Electronics Technology Group Corporation NO. 7 Research Institute, China); Xujia Ren and Xiaoyan Yin (Northwest University, China)

15:12 Enhancing Water Pollutant Detection with few Training Samples using Feature Image and Acoustic Signals

Jie Zhang (Xi'an University of Posts & Telecommunications, China); Kexin Zhou (Xian University of Posts and Telecommunications, China); Zhongmin Wang (Xi'an University of Posts and Telecommunications, China); Lei Xie and Lei Tang (Xian University of Posts and Telecommunications, China)

Room 4

Time: 16:00-17:30, 11 Aug, 2023
Session：NGN1
Session Chair: Chao Li

16:00 Semantic Communication on Multi-Hop Concatenated Relay Networks

Yiran Yin (Huazhong University of Science and Technology, China); Likun Huang (Wuhan Institute of Technology, China); Qiang Li and Bing Tang (Huazhong University of Science and Technology, China); Ashish Pandharipande (NXP Semiconductors, The Netherlands); Xiaohu Ge (Huazhong University of Science & Technology, China)

16:18 Link State Based Routing and Scheduling

Co-Design of Time-Triggered Traffic in Time-Sensitive Networking

Xiangcheng Wang, Ju Liu, Zheng Dong, Ziyu Li, Qian Zhang and Lina Zheng (Shandong University, China)

16:36 Contact-aware Multiple-Layer CHORD for routing in Large-scale Satellite Networks

Han Li (Harbin Institute of Technology (Shenzhen), China); Yue Li (Harbin Institute of Technology, Shenzhen, China); Qinyu Zhang (Shenzhen Graduate School, Harbin Institute of Technology, China); Zhihua Yang (Harbin Institute of Technology, China)

16:54 An Effective Resource Deployment Scheme for IoTs Devices with Federated Learning

Yongmin Zhang, Zhipeng Tang and Jianxi Chen (Central South University, China); Huilin Li (Central South University, Taiwan); Zhaohui Li (Central South University, China)

Room 5

Time: 10:40-12:10, 11 Aug, 2023
Session：MUC1
Session Chair: Yu Huang

10:40 QPCR: A Power Controlled Routing Protocol Based On Q-learning For Energy-constrained Underwater Wireless Sensor Networks

Yuan Yudong and Shanshan Song (Jilin University, China); Cangzhu Xu (JiLin University, China); Jun Liu (Beihang University & Smart Ocean Technology Co., Ltd, China); Jun-Hong Cui (University of Connecticut & Jilin University, USA)

10:58 Modeling and Analysis of End-to-End LEO Satellite-aided Shore-to-Ship Communications

Xu Hu and Bin Lin (Dalian Maritime University, China); Ping Wang (York University, Canada); Xiao Lu (University of Alberta, Canada); Haichao Wei and Shuang Qi (Dalian Maritime University, China)

11:16 Doubly-Spread Channel Equalization based on Channel Shortening in Underwater Distributed Acoustic Sensing Communications

Xingbin Tu, Shaojian Yang, Jie Xi, Yulin Jiang, Yan Wei and Fengzhong Qu (Zhejiang University, China)

11:34 ACARP: An Adaptive Channel-Aware Routing Protocol for Underwater Wireless Sensor Networks

Shouheng Che and Shanshan Song (Jilin University, China); Cangzhu Xu (JiLin University, China); Jun Liu (Beihang University & Smart Ocean Technology Co., Ltd, China); Jun-Hong Cui (University of Connecticut & Jilin University, USA)

11:52 A Novel Feedback-based MAC Protocol Design

for Cognitive VDES towards E-navigation

Yinhang Liang, Bin Lin and Xu Hu (Dalian Maritime University, China); YongBo Fu (DaLian Maritime University, China)

Room 5

13:30 Deep Learning Aided Intelligent Sensing and Identification for Future Wireless Communications
(Invited talk)

Guan Gui (Nanjing University of Posts and Telecommunications, China)

14:00 Phase Shift Signaling Reduction for IRS-Assisted Hybrid Satellite-Terrestrial Relay Networks by Exploiting Global Attention

Xianhua Yu and Li Dong (Macau University of Science and Technology, Macao); Haotong Cao (Nanjing University of Posts and Telecommunications, China); Zhi Lin (National University of Defense Technology, China); Daosen Zhai (Southeast University, Nanjing, China); Jiangzhou Wang (University of Kent, United Kingdom (Great Britain))

14:18 Joint Frame Structure and Beamforming Design for Integrated Localization and Communication Network

Yexin Shi (Zhejiang University, China); Wei Qi (Zhejiang University City, China); Rui Yin (Zhejiang University City Colle, China & KwaZulu-Natal University, South Africa); Wenjin Yu and Jie Qian (China Tobacco Zhejiang Industrial Co. LTD., China); Zhihui Ye (China Tobacco Zhejiang Industrial Co. LTD, China); Celimuge Wu (The University of Electro-Communications, Japan)

14:36 Distributed Resource Optimization and Allocation for UAV-Assisted MEC in Internet of Vehicles

Yujie Fang, Meng Li, Pengbo Si, Ruizhe Yang and Zhuwei Wang (Beijing University of Technology, China)

14:54 Challenges and Standardization on 5G with Satellite Access

Xu Xia and Wen Qi (China Telecom Research Institute, China); Chengli Mei (China Telecom Technology Innovation Center, China); Heng Wang (China Telecom Research Institute, China)

15:12 An Improved Energy Efficient Cross-layer Scheme in Underwater Wireless Sensor Networks

Chenbo Hu and Bo Li (Harbin Institute of Technology at Weihai, China); Hongjuan Yang (Harbin Institute of Technology, China); Xiuhong Wang (Harbin Institute of Technology at Weihai, China)

Room 5

16:00 Soft OSD-Sliding Window Decoding for Staircase LDPC Codes in Deep Space Communications

Yaosheng Zhang (Harbin Institute of Technology (Shenzhen), China); Jian Jiao (Harbin Institute of Technology - Shenzhen, China); Ye Wang (Peng Cheng Laboratory, China); Yasong Wang (Phytium Technology Company Limited, China); Rongxing Lu (University of New Brunswick, Canada); Qinyu Zhang (Shenzhen Graduate School, Harbin Institute of Technology, China)

16:18 Resource Provisioning for Heterogeneous Services in UAV-Assisted MEC System

Lijiao Zhang, Yanpeng Dai and Ling Lyu (Dalian Maritime University, China); Qiang Ye (Memorial University of Newfoundland, Canada); Nan Cheng and Junyu Liu (Xidian University, China)

16:36 Research on Hybrid Control Architecture and Related Functions of Satellite Network

Tao Junyan and Kanglian Zhao (Nanjing University, China); Chen Linkun (Huawei, China); Wenfeng Li (Nanjing University, China)

16:54 Refined Visibility Modeling and Link Allocation Algorithm Considering Efficiency and Stability for Inter-Satellite Laser Link Network

Xingxing Bao, Wenfeng Li, Kanglian Zhao and Yuan Fang (Nanjing University, China)

17:12 A DAG-Based Reliable Routing Mechanism for Highly Dynamic UAV Mesh Network

Fajun Wang and Gaofeng Nie (Beijing University of Posts and Telecommunications, China); Hui Tian (Beijng University of posts and telecommunications, China); Zhinuo Hu (Beijing University of Posts and Telecommunications, China); Bo Zhang and Yaozhong Zhao (China Huaneng Yimin Open Coal Mine, China)

Room 6

10:40 Intelligent Reflecting Surface-aided Robust

Directional Modulation with Hardware Impairments

Yanyun Gong (Northwest University of Technology, China); Zi-Xiong Yang, Wenbin Sun, Qian Xu, Jiansong Huang and Ling Wang (Northwestern Polytechnical University, China)

10:58 EM-Whisperer: A Voice Injection Attack via Powerline for Virtual Meeting Scenarios

Jiachun Li, Yan Meng, Le Zhang, Fazhong Liu and Haojin Zhu (Shanghai Jiao Tong University, China)

11:16 Adversarial Learning Aided Malicious Network Traffic Detection Based on EDE Framework

Lanping Zhang, Guan Gui and Yu Wang (Nanjing University of Posts and Telecommunications, China); Bamidele Adebisi (Manchester Metropolitan University, United Kingdom (Great Britain)); Hsiao-Chun Wu (Louisiana State University, USA); Tomoaki Otsuki (Keio University, Japan)

11:34 A Lightweight Mutual Authentication Scheme with Fault Tolerance in Smart Elderly Care System

Songnian Zhang, Zeming Zhou, Jinkun Gui and Rongxing Lu (University of New Brunswick, Canada); Mohammad Mamun (National Research Council of Canada, Canada)

11:52 A Diffusion Model-Based Open Set Identification Method for Specific Emitters

Wenyan Wang, Zheng Dou, Jiangzhi Fu and Yun Lin (Harbin Engineering University, China)

Room 6

Time: 13:30-15:30, 11 Aug, 2023
Session：CIS2
Session Chair: Chengzhe Lai

13:30 Key Technologies of Electric Power Data Security Governance in Open Network Environment (Invited talk)

Mi Wen (Shanghai University of Electric Power, China)

14:00 Secure and Reliable Multipath Transmission Scheme Based on Interleaving Network Encoding

ZongZheng Wang, Yuyang Zhang, Ping Dong, Tao Yang and Hongke Zhang (Beijing Jiaotong University, China)

14:18 GB-IDS: An Intrusion Detection System for CAN Bus Based on Graph Analysis

Yan Meng, Jiachun Li and Fazhong Liu (Shanghai Jiao Tong University, China); Shaofeng Li (Peng Cheng Laboratory, China); Haotian Hu (Intel, China); Haojin Zhu (Shanghai Jiao Tong University, China)

14:36 Digital Twin-enabled Secure Charging Reservation for Electric Vehicle

Guanjie Li (Xi'an University of Posts and Telecommunications, China); Tom H. Luan, Jinkai Zheng and Dihao Hu (Xidian University, China); Chengzhe Lai (Xi'an University of Posts and Telecommunications, China); Zhou Su and Haixia Peng (Xi'an Jiaotong University, China)

14:54 Blockchain-based Multi-Factor Group Authentication in Metaverse

Chengzhe Lai, Hao Wang, Haoyan Ma and Dong Zheng (Xi'an University of Posts and Telecommunications, China)

15:12 A Scheme for Robust Federated Learning with Privacy-preserving Based on Krum AGR

Xiumin Li and Mi Wen (Shanghai University of Electric Power, China); Siying He (Shanghai University of Electric Power & Computer Science and Technology, China); Rongxing Lu (University of New Brunswick, Canada); Liangliang Wang (Shanghai University of Electric Power, China)

Room 6

Time: 16:00-17:30, 11 Aug, 2023
Session：MUC2
Session Chair: Haichuan Ding

16:00 Vector-Based Forwarding Protocol for Acoustic-Radio Cooperative Maritime Network

Zilong Jiang, Yan Wang, Fangjiong Chen and Hua Yu (South China University of Technology, China)

16:18 Energy-Efficient Transmission and Computation Resource Optimization for UAV-assisted NOMA-based Maritime Internet of Things

Chaoyue Zhang, Bin Lin, Ling Lyu, Xu Hu and Shuang Qi (Dalian Maritime University, China)

16:36 Energy-efficient Data Collection in AUV-assisted 3D Clustering UASN

Zhonghan Hao (Harbin Institute of Technology, China); Wei Li (Harbin Institute of Technology, Shenzhen, China); Qinyu Zhang (Shenzhen Graduate School, Harbin Institute of Technology, China)

16:54 Cooperative Coverage Path Planning for AUVs in Integrated Underwater Acoustic Communication and Detection Networks

Yike Wu and Xiaoxiao Zhuo (Shanghai Institute of Microsystem and Information Technology, Chinese Academy of Sciences, China); Liang Tang (Shanghai Institute of Microsystem and Information Technology, Chinese Academy of Science, China); Wen Wu (Peng Cheng Laboratory, China); Fengzhong Qu (Zhejiang University, China)

17:12 A Deep Semantic Autoencoder for Maritime Wireless Communications

Xiaoling Han, Bin Lin, Nan Wu, Shuai Shao and Haocheng Wang (Dalian Maritime University, China)

Lobby (Poster Sessions)

__Time: 10:20-12:10, 11 Aug, 2023__
__Session：AIN5/6，CTS2, CIS5__

P1-1 Optimizing a 5G mmWave Hybrid Beamforming Architecture in a Reinforcement Learning Approach

Qiuhu Gong, Huanyu Dong and Xiaojun Hei (Huazhong University of Science and Technology, China)

P1-2 Edge Caching Based on Deep Reinforcement Learning

Farnaz Niknia and Ping Wang (York University, Canada); Aakash Agarwal (IIITNR, India); Zixu Wang (South China University of Technology, China)

P1-3 Age of Local Information for Fusion Freshness in Internet of Things

Taige Chang and Xianghui Cao (Southeast University, China); Yu Cheng (Illinois Institute of Technology, USA)

P1-4 A training-time friendly network for real-time drone detection

Miao Li, Shengjian Mao, Hanzhuo Wang, Zhiguo Shi and Chengwei Zhou (Zhejiang University, China)

P1-5 Novel Online-Offline MA2C-DDPG for Efficient Spectrum Allocation and Trajectory Optimization in Dynamic Spectrum Sharing UAV Networks

Rui Ding, Fuhui Zhou, Yuben Qu, Chao Dong and Qihui Wu (Nanjing University of Aeronautics and Astronautics, China); Tony Q. S. Quek (Singapore University of Technology and Design, Singapore)

P1-6 Leveraging Deep Reinforcement Learning for Geolocation-based MIMO Transmission in FD-RAN

Zongxi Liu, Kai Yu and Tianqi Zhang (Nanjing University, China); Jingbo Liu (Shanghai Jiao Tong University, China); Jiacheng Chen (Peng Cheng Laboratory, China); Haibo Zhou (Nanjing University, China); Sherman Shen (University of Waterloo, Canada)

P1-7 Interpretable and Secure Trajectory Optimization for UAV-Assisted Communication

Yunhao Quan, Nan Cheng, Xiucheng Wang, Jinglong Shen, Longfei Ma and Zhisheng Yin (Xidian University, China)

P1-8 An Efficient Multimodal Fusion Pipeline for Nighttime 3D Object Detection with PointrendPainting

Xiting Peng, Tingkai Zhang and Xiaoyu Zhang (Shenyang University of Technology, China)

P1-9 PHY Secure Hybrid Precoding with Max-Min Fair Energy Harvesting for mmWave MU-MIMO-SWIPT Communications

Bowen Xue (Zhengzhou University, China); Chi Zhang (China Information Technology Consulting & Designing Institute Ltd., China); Dandan Mao and Zhengyu Zhu (Zhengzhou University, China); Wenxiang Shi (China Information Technology Consulting & Designing Institute Ltd., China); Ning Wang (Zhengzhou University, China)

P1-10 Multi-agent Reinforcement Learning-based User Scheduling and Resource Allocation in Cell-free Networks

Wei Zhang, Yurong Qian and Wei Xu (Southeast University, China); Derrick Wing Kwan Ng (University of New South Wales, Australia); Xiaohu You (National Mobile communication Research Lab., Southeast University, China)

P1-11 A Unified Framework of Array Codes Based on Vector Linear Network Coding

Qifu T Sun, Sheng Jin, Zhe Zhai and Hao Wei (University of Science and Technology Beijing, China); Zongpeng Li (Tsinghua University, China)

P1-12 A Novel Hamming Check Concatenated Polarization-Adjusted Convolutional (PAC) Codes

Aolin Liu (Harbin Institute of Technology Shenzhen, China); Bowen Feng (Harbin Institute of Technology (Shenzhen), China); Chulong Liang (ZTE Corporation, China & State Key Laboratory of Mobile Network and Mobile Multimedia Technology, China); Jin Xu (ZTE, China); Qinyu Zhang (Shenzhen Graduate School, Harbin Institute of Technology, China)

P1-13 STAR-RIS Enhanced Covert Communication with Delay Constraint

Beixi Cheng, Jinsong Hu and Youjia Chen (Fuzhou University, China); Feng Shu (Hainan University, China); Zhizhang (David) Chen (Dalhousie University, Canada)

P1-14 Secure and Privacy-preserving Network Slicing in 3GPP 5G System Architecture

Xiangman Li, Miao He and Jianbing Ni (Queen's University, Canada)

P1-15 Privacy-Preserving Model Aggregation for Asynchronous Federated Learning

Jianxiang Zhao (Queens University, Canada); Xiangman Li and Jianbing Ni (Queen's University, Canada)

P1-16 One-class Physical Layer Authentication under Time-varying Fading Channels

Boliang Han, Zhenzhen Gao, Xuewen Liao and Kangze Li (Xi'an Jiaotong University, China)

P1-17 Entity Interactivity-Aware Graph Encoder-Decoder Networks for Explainable Relation Prediction against Advanced Persistent Threats

Xiao Yang (Shanghai Jiao Tong University, China); Mianxiong Dong and Kaoru Ota (Muroran Institute of Technology, Japan); Gaolei Li (Shanghai Jiao Tong University, China); Chaofeng Zhang (Advanced Institute of Industrial Technology, Japan)

P1-18 Deep Learning-Based Log Anomaly Detection for 5G Core Network

Yawen Tan (Xidian University, China); Jiadai Wang, Jiajia Liu and Yuanhao Li (Northwestern Polytechnical University, China)

P1-19 Blockchain-assisted Cross-Domain Authentication and Access Control for Low-altitude UAV

Hengchang Pan, Ping Cao and Wei Wang (Nanjing University of Aeronautics and Astronautics, China); Yiliang Liu (Xi'an Jiaotong University, China); Zhisheng Yin (Xidian University, China)

Lobby (Poster Sessions)

Time: 15:30-17:30, 11 Aug, 2023
Session：IOT3/4, SAG6, CEC3

P2-1 SA-SWS: A Self-Adaptive Sleep/Wake-Up Scheduling Approach for Linear Sensor Networks

Jiao Ma and Fei Tong (Southeast University, China)

P2-2 Remaining Useful Life Prediction of the Aviation Engine Based on the Long-Short-Term-Memory Network with a Feature Selection Mechanism

Qiu Xiaohan and Fan Yuxin (Key Lab of CS&AUS of Zhejiang Province, Zhejiang, China); Zhiguo Shi and Yong Wang (Zhejiang University, China)

P2-3 On the Performance of Joint Resource Allocation and Control in Industrial IoT

Ying Wang (Harbin Institute of Technology (Shenzhen), China); Shaohua Wu (Harbin Institute of Technology, China); Jian Jiao (Harbin Institute of Technology - Shenzhen, China); Ning Zhang (University of Windsor, Canada); Qinyu Zhang (Shenzhen Graduate School, Harbin Institute of Technology, China)

P2-4 Covert Communication for Intelligent Reflecting Surface based Symbiotic Radio Systems

Zhen Xu, Manlin Wang and Bin Xia (Shanghai Jiao Tong University, China); Jiangzhou Wang (University of Kent, United Kingdom (Great Britain))

P2-5 Anomaly Detection Method based on Multi-Source Subsequence Multi-View Fusion

Yizhuo Guo (Beijing University of Posts and Telecommunications); Peng Xu, Keqi Liu and Anyi Zhang (Beijing University of Posts and Telecommunications, China)

P2-6 Resource Allocation for Coupled Slices in Edge-Assisted Industrial IoT Systems

Xiaojing Wen and Cailian Chen (Shanghai Jiao Tong University, China); Cheng Ren (Shanghai Jiaotong University, China); Ling Lyu (Dalian Maritime University, China); Xinping Guan (Shanghai Jiao Tong University, China)

P2-7 Multi-Agent Reinforcement Learning for UAVs 3D Trajectory Designing and Mobile Ground Users Scheduling with No-Fly Zones

Yunfei Gao (Wuhan University, China); Song Wang (Avic Xian Aircraft Industry Group Company LTD, China); Mingliu Liu and Yulin Hu (Wuhan University, China)

P2-8 Incremental Tensor Decomposition and BiGRU based Network Traffic Prediction for IIoT

Sifu Yan, Na Li, Hangguan Shan, Shibo He and Zhiguo Shi (Zhejiang University, China); Qi Zhang and Xianhua He (Nokia Solutions and Networks System Technology (Beijing) Co., Ltd, China)

P2-9 Distributed Computation Offloading Based on Deep Reinforcement Learning and Blockchain in Internet of Vehicles

Guobin Zhang and Luo Zehao (Dongguan University of Technology, China); Tingting Yang (Pengcheng Laboratory, Shenzhen, China))

P2-10 Blockchain-Empowered Space-Air-Ground Integrated Networks for Remote Internet of Things

Wenchao Liu (Shenzhen Institute of Advanced Technology, China); Junyu Wang (The Chinese University of Hong Kong, Shenzhen, China); Huijun Xing (The Chinese University of Hong Kong (Shenzhen), China); Zhenzhen Jin (Southern University of Science and Technology, China); Yanyan Shen (Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences, China); Xuhui Zhang (Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences & The Chinese University of Hong Kong, Shenzhen, China)

P2-11 Performance Analysis of Space-Air-Ground Integrated Network (SAGIN): UAV Altitude and Position Angle

Jingjing Tan, Fengxiao Tang and Ming Zhao (Central South University, China); Nei Kato (Tohoku University, Japan)

P2-12 MIMO Signals Classification with Cauchy Noise in Space-air-ground Integrated Networks

Mingqian Liu and Yae Chai (Xidian University, China)

P2-13 A Novel Spatial Spectrum Sensing Scheme Enabled by an Unmanned Aerial Vehicle

Hairen Zhang, Fuhui Zhou and Chao Dong (Nanjing University of Aeronautics and Astronautics, China); Qihui Wu (PLA Unicersity of Science and Technology, China)

P2-14 A General 3D GBSM for 6G Satellite Communication Systems

Zixin Li (Southeast University, China); Hengtai Chang (The Purple Mountain Laboratories Southeast University, China); Jie Huang (Southeast University, China); Cheng-Xiang Wang (Southeast University, China & Purple Mountain Laboratories, China)

P2-15 Secure Mobile Edge Computing for Integrated HAP and UAV Networks

Xiaofei Qin (Dalian Maritime University & No, China); Zhenyu Na, Xu Wu, Mudi Xiong and Bin Lin (Dalian Maritime University, China)

P2-16 Resource Allocation Strategy in UAV-D2D-Aided Multi-Relay MEC System with Energy Harvesting

Hongyi You, Yisheng Zhao, Kaige Jian, Liang Li and Xinyu Zhang (Fuzhou University, China)

P2-17 Joint Task Offloading and Resource Allocation for RIS-assisted UAV for Mobile Edge Computing Networks

Qilie Liu, Jie Han and Qian Liu (Chongqing University of Posts and Telecommunications, China)

P2-18 Heterogeneous Federated Learning with Cross-layer Model Fusion

Jing Jin, Qing Wang and Xiaofeng Liu (Tianjin University, China)

P2-19 Game-Based Task Offloading and Resource Allocation in Multi-UAV-assisted MEC Networks

Bowen Li, Han Hu and Longxiang Yang (Nanjing University of Posts and Telecommunications, China); Fuhui Zhou (Nanjing University of Aeronautics and Astronautics, China)

P2-20 Energy-efficient data compression and resource allocation for edge assisted IoT networks

Wei Jiang, Zenan Teng, Mingqing Li and Liping Qian (Zhejiang University of Technology, China)

Room 1

10:30 RIS-Aided Federated Edge Learning Exploiting Statistical CSI

Heju Li and Rui Wang (Tongji University, China); Jun Wu (Fudan University, China); Wei Zhang (The University of New South Wales, Australia); Ismael Soto (University of Santiago, Chile)

10:48 Channel Estimation and Receiver Design for URLLC in Distributed MIMO-NOMA Systems Uplink

Shihao Han (Southeast University, China); Pengcheng Zhu (National Mobile Communications Research Laboratory, Southeast University, China); Jiamin Li (National Mobile Communications Research Lab., Southeast University, China); Wang Yan (Southeast University, China)

11:06 AoI Minimization for Multi-user Networks with Delayed Feedback

YuXiao Lu and Xiaoli Xu (Southeast University, China); Xinmei Huang (Nanjing Forestry University, China)

11:24 A Method of Determining the Optimized Working SNR for OTFS Modulation with AMP Receiver

Xu Zhou and Yuan Zhang (Southeast University, China)

11:42 A Low-Complexity PAPR Reduction Scheme for Multi-User MIMO-OFDM Systems

Zhang Xi, Zhong Zheng, Fei Zesong and Weihua Yu (Beijing Institute of Technology, China)

Room 1

14:00 RIS-assisted Spatially Correlated Cell-Free Massive MIMO System

Xin Tu and Hao Fang (Nanjing University of Posts and Telecommunications, China); Yao Zhang (Zhejiang Normal University, China); Jie Yang and Longxiang Yang (Nanjing University of Posts and Telecommunications, China)

14:18 Puncture-Predictive Fairness Scheduling Scheme for eMBB and URLLC Based on TD3 Algorithm

Jiangfeng Guo and Gaofeng Nie (Beijing University of Posts and Telecommunications, China); Hui Tian (Beijng University of posts and telecommunications, China); Bo Zhang and Yuan Jinxiang (China Huaneng Yimin Open Coal Mine, China)

14:36 Performance Analysis of RIS-Aided Space Shift Keying With Channel Estimation Errors

Xusheng Zhu, Wen Chen, Qingqing Wu and Liwei Wang (Shanghai Jiao Tong University, China)

14:54 Learning-aided User Scheduling Algorithm for TDD MIMO with Reduction in Pilot Contamination

Zibo Li (Nanjing University of Posts and Telecommunications, China); Su Pan (Nanjing University of Posts & Telecommunications, China); Yuxi Qin (Nanjing University of Posts and Telecommunications)

15:12 DDQN Assisted Intelligent Covert Communication for Cooperative UAV Swarm

Xiaomeng Li (Xidian University, China)

Room 1

16:00 Wideband Doppler Channel Modeling for Wireless Communications with High Mobility

Xiong Deng (Southwest Jiaotong University and TU Eindhoven, The Netherlands); Hongyu Meng, Ziqiang Gao, Xihua Zou and Peixuan Li (Southwest Jiaotong University, China); Pan Wei (Chengdu, China); Lianshan Yan (Southwest Jiaotong University, China)

16:18 Two-Stage Beamforming Design for Massive MIMO with Finite-Alphabet Inputs

Conghao Zhang, Qi Wang and Wuyang Zhou (University of Science and Technology of China, China)

16:36 Topology Optimized Design of Non-uniform Planar Array for Massive MIMO Systems

Lihua Pang and Yeqian Cheng (Xi'an University of Science and Technology, China); Yang Zhang (Xidian University, China); Yijian Chen (ZTE Corporation, China); Anyi Wang (Xi'an University of Science and Technology, China)

16:54 Content-Adaptive Cache Partitioning for Two-Layer Mobile Edge Networks

Yingxue Zhao (Beijing University of Post and Telecommunications, China); Ailing Xiao (Beijing University of Posts and Telecommunications & School of Information and Communication Engineering, China); Sheng Wu (Beijing University of Posts and Telecommunications, China); Chunxiao Jiang (Tsinghua University, Beijing, China); Linling Kuang (Tsinghua University,

China); Yuanming Shi (ShanghaiTech University, China)

17:12 Aggregation Design and Resource Allocation for Decentralized Learning over Wireless Networks

Yu Wang, Benshun Yin, Zhiyong Chen and Bin Xia (Shanghai Jiao Tong University, China)

Room 2

Time: 10:30-12:00, 12 Aug, 2023
Session：MWN4
Session Chair: Fei Shen

10:30 Performance Evaluation of Wireless PoW Blockchain Networks: A Complex Network Perspective

Jiankun Su and Yutao Jiao (Army Engineering University, China); Weiyi Wang (Army Engineering University of PLA, China); Yuhua Xu (College of Communications Engineering, PLA University of Science and Technology, China); Gui Fang, Haichao Wang and Guoxin Li (Army Engineering University of PLA, China)

10:48 Multiuser Selection and Performance Analysis for Mobile Computing and 5G Aided Smart Grid Network

Zhu Hailong (China Southern Power Grid Co., Ltd, China); Liming Chen (China Southern Power Grid, China); Guoyi Zhang (China Southern Power Grid, Hong Kong); Danke Hong (Power Dispatching and Control Center of China Southern Power Grid, China)

11:06 Learn to Wait and Minimize Age of Information over Markov Channels

Baoluo Chen, Yingcun Su and Liang Huang (Zhejiang University of Technology, China)

11:24 A Routing Algorithm Based on Prioritized Replay Double DQN for Private Internet of Things

Wei Wu, Chang Liu and Pengfei Sun (Harbin Institute of Technology, China); Li Tang and Yang Yu (Hytera Communications Corporation Limited, China)

11:42 A Geographic Location Prediction-based Routing Algorithm for Flying Ad Hoc Networks

Tianxiang Zhou (National Mobile Communications Research Laboratory, Southeast University, China); Feng Yan (Southeast University, China); Fei Shen (Shanghai Institute of Microsystem and Information Technology & Chinese Academy of Sciences, China); Weiwei Xia and Lianfeng Shen (National Mobile Communications Research Laboratory, Southeast University, China)

Room 2

Time: 14:00-15:30, 12 Aug, 2023
Session：MWN5
Session Chair: Guan Gui

14:00 Utility Maximization for NFV-Based Tactile Internet

Xinmian Xu, Haie Dou, Mingkai Chen and Lei Wang (Nanjing University of Posts and Telecommunications, China)

14:18 Risk-aware Online Optimization of Cross-Layer Resource Allocation in Next-Generation WLANs

Jing Zhang and Jinke Zheng (Huazhong University of Science and Technology, China); Lin Xiang (Technical University of Darmstadt, Germany); Xiaohu Ge (Huazhong University of Science & Technology, China)

14:36 Real-Time Search-Driven Content Delivery in Vehicular Networks for AR/VR-Enabled Autonomous Vehicles

Daniel Mawunyo Doe (University of Houston, USA); Dawei Chen (InfoTech Labs, Toyota North America R&D, USA); Kyungtae Han (InfoTech Labs, Toyota Motor North America R&D, USA); Yanpeng Dai (Dalian Maritime University, China); Linda Jiang Xie (University of North Carolina at Charlotte, USA); Zhu Han (University of Houston, USA)

14:54 Minimum Latency Packet Coding and Scheduling in Multi-path Networks with Delayed Feedback

Zihao Dai, Zhicheng Zhu and Xiaoli Xu (Southeast University, China); Xinmei Huang (Nanjing Forestry University, China)

15:12 Joint Design of Power Allocation and Beamforming for Energy Efficiency Optimization in D2D-Enabled Distributed MIMO System

Guangying Wang, Xiangbin Yu, Jinjin Zhu, Kai Yu and Panpan Qian (Nanjing University of Aeronautics and Astronautics, China)

Room 2

Time: 16:00-17:30, 12 Aug, 2023
Session：MWN6
Session Chair: Zhongyuan Zhao

16:00 Optimizing Energy Consumption in UAV-Assisted Data Transmission Through User-Aware Caching

Qing Wei (North China University of Technology, China); Xi Han and Zhongyuan Zhao (Beijing University of Posts and

Telecommunications, China); Bai Wenle (North China University of Technology, China)

16:18 Multi-cell MIMO Semantic Communication based Distributed Training

Hongyu Ji, Xiaoming Wang, Dapeng Li and Rui Jiang (Nanjing University of Posts and Telecommunications, China); Youyun Xu (Nanjing University of Posts and Telecommunications & Shanghai Jioatong University, China)

16:36 Mobility Aware and Traffic Driven Neighbor Discovery For FANET

Yilei Shi, Jie. Zhang, Lina Zhu, Tom H. Luan and Lei Ding (Xidian University, China)

16:54 Dynamic TDD configuration for multiple UL/DL service requirements under asymmetric coverage in UAV-assisted cellular network

Jing Chen, Yun Meng, Wei Wang, Xinyi Liu and Fan Liu (Chang'an University, China)

17:12 A Dynamic and Local Perspective: A Reliable Q-Routing Protocol based on Fuzzy Logic for FANETs

Penghui Hu (Najing University, China & Peng Chen Laboratory, China); Jian Wang and Yirui Huang (Nanjing University, China); Yan Ma (Peng Cheng Laboratory, China); Cunzhuo Zhao (Pengcheng Laboratory, China); Chaofan He (Peng Cheng Laboratory, China)

Room 3

Time: 10:30-12:00, 12 Aug, 2023
Session：AIN2
Session Chair: Sheng Yue

10:30 Reinforcement Learning based Downlink OFDMA Scheduling for Time-Sensitive WiFi Networks

Junjie He, Bowen Tan and Yayu Gao (Huazhong University of Science and Technology, China)

10:48 Ranking Cellular Internet Card User VIP Values Based on Graph Clustering with Usage Data

Shijie Gao, Fan Wu, Kai Qian and Feng Lyu (Central South University, China); Jinbao Ren (Aerospace Information Innovation Research Institute, Chinese Academy of Sciences (Su Zhou), China); Shixu Chen (Chinese Academy of Sciences Su Zhou, China)

11:06 QoE-based Deep Reinforcement Learning for Resource Allocation in Real Time XR Video Transmission

Zhaocheng Wang and Rui Wang (Tongji University, China); Jun

Wu (Fudan University, China)

11:24 Channel Estimation for mmWave Massive MIMO Systems Using Graph Neural Networks

Ming Ye (Southeast University, China); Xiao Liang (National Mobile Communication Research Lab., Southeast University, China); Cunhua Pan, Yinfei Xu, Ming Jiang and Chunguo Li (Southeast University, China)

11:42 A Routing Optimization Policy Using Graph Convolution Deep Reinforcement Learning

Yongan Guo, Wu Qingpeng and Hao She (Nanjing University of Posts and Telecommunications, China)

Room 3

Time: 14:00-15:30, 12 Aug, 2023
Session：AIN3
Session Chair: Minghui Min

14:00 Secure IoV Access Control with Safe Reinforcement Learning

Lixin Liu (Nanjing University of Aeronautics and Astronautics, China)

14:18 Reinforcement Learning Based AUV Localization in Underwater Acoustic Sensor Networks

Chuhuan Liu, Yifan Chen, Liang Xiao, Helin Yang, Wei Su and Xudong You (Xiamen University, China)

14:36 IRS-Aided Mobile Edge Computing for Mine IoT Networks using Deep Reinforcement Learning

Peng Zhang, Minghui Min, Jiayang Xiao and Shiyin Li (China University of Mining and Technology, China); Hongliang Zhang (Peking University, China)

14:54 Flexible Channel Access Against Unknown Dynamic Jamming Attack: A Reinforcement Learning Approach

Songyi Liu (Army Engineering University of PLA, China); Wen Li (Army Engineering University, China); Li Cui (Army Engineering University of PLA, China); Xin Liu (Guilin University of Technology, China); Chen Xueqiang (Nanjing University of Aeronautics and Astronautics, China); Runfeng Chen and Yangyang Li (Army Engineering University of PLA, China); Yuhua Xu (College of Communications Engineering, PLA University of Science and Technology, China)

15:12 5G Spectrum Learning-Based Passive UAV Detection in Urban Scenario

Luning Lin, Ningning Yu, Yong Wang and Zhiguo Shi (Zhejiang University, China)

Room 3

16:00 Mobility-Aware Joint User Scheduling and Resource Allocation for Low Latency Federated Learning

Kecheng Fan and Wen Chen (Shanghai Jiao Tong University, China); Jun Li and Xiumei Deng (Nanjing University of Science and Technology, China); Xuefeng Han (Shanghai Jiao Tong University, China); Ming Ding (Data 61, Australia)

16:18 Dynamic Caching and Rate Control System for Short Videos using Reinforcement Learning

Jianke Li, Yanming Sun, Dihao Hu, Chao He and Tom H. Luan (Xidian University, China)

16:36 Collaborative Inference for MEC Services Based on Multimodal Deep Neural Network

Yu Liu and Chuxuan Wang (Xiamen University, China); Yilin Xiao (Shenzhen Institute of Artificial Intelligence and Robotics for Society, China); Zefang Lv and Liang Xiao (Xiamen University, China); Xiangyang Ji (Tsinghua University, China)

16:54 3D Hand Pose Estimation and Gesture Recognition Network Based on Hand-Object Interaction Information

Qingshan Yin (Shandong New Generation Information Industrial Technology Research Institute, China); Qiaochu Zhao (Xian Jiaotong Liverpool University, China); Huijie Jia (Qilu University of Technology, China); Yan Gao, Luoluo Feng, Chaoming Li and Yao Cheng (Shandong New Generation Information Industrial Technology Research Institute, China); Bin Lin (Dalian Maritime University, China)

Room 4

10:30 Securing NOMA by an Active RIS: Joint Reflection and Jamming Design

Mengyi Ji, Jian Chen and Lu Lv (Xidian University, China); Yinghui Ye (Xi'an University of Posts and Telecommunications, China); Hao Luo (Xidian University, China); Zhiguo Ding (University of Manchester, United Kingdom (Great Britain))

10:48 Markov Chain Monte Carlo Based MIMO

Detection with Reduced Complexity

Bowen Wang and Shan Yang (China Telecom Research Institute, China); Nanxi Li (China Telecom, China); Hang Yin, Xiaoming She, Jianxiu Wang and Peng Chen (China Telecom Research Institute, China)

11:06 Data Transmission Based on RNN Compensation over Mobile Voice Channel

Xiang Gao and Tao Peng (Beijing University of Posts and Telecommunications, China)

11:24 A Novel Godard Algorithm Based On Convex Combination Pair Structure

Rui Du, Chenyan Yun, Kangkang Wang and Bin Lin (Dalian Maritime University, China)

11:42 The parameter estimation of LFM signal using generalized Versoria Wigner-Ville distribution in impulsive noise

Yuzi Dou, Sen Li and Bin Lin (Dalian Maritime University, China)

Room 4

14:00 Subcarrier Modulation Classification for MIMO-OFDM System with Non-Gaussian Noise

Mingqian Liu and Yi Wang (Xidian University, China); Yunfei Chen (University of Durham, United Kingdom (Great Britain))

14:18 Prediction-Assisted Compressed Spectrum Sensing

Zihang Song (King's College London, United Kingdom (Great Britain)); Jian Yang (China Academy of Information and Communications Technology, China); Han Zhang (University of Surrey, UK); Jinbo Peng and Yue Gao (Fudan University, China)

14:36 Blind Beamforming for RIS-aided High-Speed Train Communication with Doppler Pre-Compensation

Fuyong Han, Jiakang Zheng and Mingbo You (Beijing Jiaotong University, China); Huahua Xiao (ZTE Corporation, China); Jiayi Zhang (Beijing Jiaotong University, China); Bo Ai (Beijing Jiaotong University & State Key Lab of Rail Traffic Control and Safety, China)

14:54 An Improved Particle Swarm Optimization Indoor Positioning Method based on the Weighted Adaptive KNN Algorithm

Jin Wang and Feiyue Shi (Xi'an University of Posts and Telecommunications, China); Pengwu Wan (XI'AN University of

Posts&Telecommunications, China); Maolin Chen (Institute of Electronic Engineering China Academy of Engineering Physics Mianyang, China); Fan Jiang (Xi'an University of Posts and Telecommunications, China)

15:12 Time-Averaged Fractionally pth-order Moments Algorithm for Cyclostationary Signals Under non-Gaussian Environments

Omer M. Abdelrhman, Sen Li and Bin Lin (Dalian Maritime University, China)

Room 4

16:00 Off-grid DOA Estimation on Uniform Plane Array Based on Structured Sparse Bayesian Learning

Siyuan Wang, Wei Chen and Bo Ai (Beijing Jiaotong University, China)

16:18 Modeling of Multi-granularity Electromagnetic Spectrum Sequence Based on TS Model

Zhuangzhuang Nie, Zhigang Li, Shuang Li and Yu Han (Harbin Engineering University, China)

16:36 BiLSTM-Based Frame Synchronization for Overlapped S-AIS Signals: A Learning-Empowered Approach

Tiancheng Yang and Dongxuan He (Beijing Institute of Technology, China); Zhiping Lu (China Academy of Telecommunication Technology, China); Hua Wang, Hongye Zhao and Zheng Wu (Beijing Institute of Technology, China)

16:54 Anti-Eavesdropping and Anti-Jamming Waveform Design with Coding Split Index Modulation

Yinglin Chen (China Telecom Research Institute, China); Chao Wang (Xidian University, China); JiangBo Si (Xi'dian, China); Tongyang Xu (University College London, United Kingdom (Great Britain))

17:12 On the Spectral Efficiency of Uplink Massive MIMO with Low-Resolution ADCs Over Finite-Dimensional Channels

Junxian Chen, Weiqiang Tan and Maobin Tang (Guangzhou University, China); Xianda Wu (South China Normal University, China)

Room 5

10:30 UAV-Assisted Data Synchronization for Digital-Twin-Enabled Vehicular Networks

Guoquan Wu (Yanshan University, China); Jiangtian Nie (Nanyang Technological University (NTU), Singapore); Jianhang Tang (Guizhou University, China); Yang Zhang (Nanjing University of Aeronautics and Astronautics, China); Jiang Xiao (Huazhong University of Science and Technology, China); Zehui Xiong (Singapore University of Technology and Design, Singapore)

10:48 QoE-Driven UAV Video Transmission in a Multi-UAV Network

Kesong Wu, Peng Yang, Xianbin Cao and Zongyang Yu (Beihang University, China)

11:06 Joint Offloading Selection, Beamforming Design and Resource Allocation for Satellite-Terrestrial Computing

Qi Wang and Xiaoming Chen (Zhejiang University, China); Qiao Qi (ZheJiang University, China)

11:24 Distributed Deep Learning for RIS Aided UAV-D2D Communications in Space-Air-Ground Networks

Qian You, Qian Xu, Xin Yang, Wenbin Sun and Ling Wang (Northwestern Polytechnical University, China)

11:42 Channel Prediction-based Robust Multibeam Precoding Design for LEO Satellite Internet of Things

Ming Ying and Xiaoming Chen (Zhejiang University, China)

Room 5

14:00 Low-Delay Transmission for Non-Terrestrial Networks Based on FEC and Reinforcement Learning

Jianhao Yu, Sibo Pan, Ruifeng Gao and Ye Li (Nantong University, China)

14:18 Dynamic Unmanned Aerial Vehicle Selection via Evolutionary Game

Anqi Meng (Beijing Information Science and Technology University, China); Tianshi Ren (Beijing Institute of Technology, China); Mei Yang (Beijing Institute of Fashion Technology, China); Xiaozheng Gao (Beijing Institute of Technology, China); Xianchao Zhang (Jiaxing University, China); Jinbo

Zhang (The 54th Research Institute of CETC, China)

14:36 An AoI-Guaranteed Sensor Data Collection Strategy for RIS-assisted UAV Communication System

Bowen Yang, Yao Yu, Jianqi Li and Tongze Xu (Northeastern University, China); Der Jiunn Deng (National Changhua University of Education, Taiwan); Hui-Hsin Chin (Overseas Chinese University, China); Yonghui Li (University of Sydney, Australia)

14:54 Adaptive Timescale Load Balancing Routing Algorithm for LEO Satellite Network

Shuyang Liu, Jing Liu and Bin Xia (Shanghai Jiao Tong University, China)

15:12 A Novel MIMO Channel Model for Underground Mine Communications

Xingyu Ji (Southeast University, China); Cheng-Xiang Wang (Southeast University, China & Purple Mountain Laboratories, China); Hengtai Chang (The Purple Mountain Laboratories Southeast University, China)

Room 5

Time: 16:00-17:30, 12 Aug, 2023
Session：SAG5
Session Chair: Haichao Wei

16:00 Trajectory and User Assignment Design for UAV-Assisted Wireless Communications under Rician Fading Channels

Peng Wu (Wuhan University, China); Xiaopeng Yuan, Yulin Hu and Anke Schmeink (RWTH Aachen University, Germany)

16:18 Throughput Optimization for UAV WPCN Systems with Assistance of IRS under Malicious Jamming

Shenqian Yin, Wendong Yang, Jiahui Sui and Zenghui Jiang (Army Engineering University of PLA, China)

16:36 Preamble Design for LEO Satellite Communication System

Yuan Jiang and Lei Zhao (Sun Yat-sen University, China); Wang Yanzhao (Sun Yat-Sen University, China)

16:54 Link Selection Based on Acquisition Probability in Mega Constellation Laser Networks

Junyi Yang (Harbin Institute of Technology (Shenzhen), China); Zhikai Zhang (Harbin Institute of Technology, Shenzhen & Peng Cheng Laboratory, China); Bowen Feng and Lirong An (Harbin Institute of Technology (Shenzhen), China); Qinyu Zhang (Shenzhen Graduate School, Harbin Institute of Technology, China)

17:12 Joint Relay Selection and Location Deployment for Multi-UAV Relaying Systems Based on Stackelberg Game

Jialiang Liu, Zhenyu Na and Ye Lin (Dalian Maritime University, China); Jiaxin Chen (Nanjing University of Aeronautics and Astronautics, China); Bin Lin (Dalian Maritime University, China)

Room 6

Time: 10:30-12:00, 12 Aug, 2023
Session：CIS3
Session Chair: Qichao Xu

10:30 Two-Server Private Information Retrieval with High Throughput and Logarithmic Bandwidth

Cheng Huang (University of Waterloo, Canada); Anjia Yang (Jinan University, China); Dongxiao Liu (University of Waterloo, Canada); Rongxing Lu (University of New Brunswick, Canada); Sherman Shen (University of Waterloo, Canada)

10:48 Efficient Group Authentication and Key Agreement Scheme for Vehicular Digital Twin

Chengzhe Lai and Meng Li (Xi'an University of Posts and Telecommunications, China); Guanjie Li (Xidian University, China); Dong Zheng (Xi'an University of Posts and Telecommunications, China)

11:06 Deep Reinforcement Learning for Network Security Applications With A Safety Guide

Zhibo Liu, Xiaozhen Lu and Yuhan Chen (Nanjing University of Aeronautics and Astronautics, China); Yilin Xiao (Shenzhen Institute of Artificial Intelligence and Robotics for Society, China); Liang Xiao (Xiamen University, China); Yanling Bu (Nanjing University of Aeronautics and Astronautics, China)

11:24 An Efficient Dynamic Key Management Scheme for IoT Devices in Aging in Place Systems

Vishnu Prasanth Vikraman Pillai, Zeming Zhou, Songnian Zhang and Rongxing Lu (University of New Brunswick, Canada); Mohammad Mamun (National Research Council of Canada, Canada)

11:42 An Efficient and Privacy-Preserving Outsourced Heavy Hitter Query Scheme with LDP Technique

Ellen Z. Zhang, Yunguo Guan, Songnian Zhang, Rongxing Lu and Harry Zhang (University of New Brunswick, Canada)

Room 6

Time: 14:00-15:30, 12 Aug, 2023

14:00 Secure Communication Using WFRFT-DSSS Based on Chaotic Cyclic Shift

Chenxuan Gao, Yichen Wu and Yu Zhang (Tsinghua University, China)

14:18 Estimating Location Distribution under Local Differential Privacy

Yuanyuan Hong, Youwen Zhu and Wei Wang (Nanjing University of Aeronautics and Astronautics, China)

14:36 Enhancing Digital Twin Model for Connected Vehicles by Powertrain and Longitudinal Dynamics

Xiaoxu Wang, Rong Yu, Mingxing Ye and Min Hao (Guangdong University of Technology, China)

14:54 Covert and Reliable Short-Packet Communications against A Proactive Warder

Manlin Wang, Yao Yao, Bin Xia and Zhiyong Chen (Shanghai Jiao Tong University, China); Jiangzhou Wang (University of Kent, United Kingdom (Great Britain))

15:12 An Approach for Attack Scenario Construction Based on Dynamic Attack Path Graph

Siying He (Shanghai University of Electric Power & Computer Science and Technology, China); Mi Wen and Xiumin Li (Shanghai University of Electric Power, China); Zhou Su (Xi'an Jiaotong University, China)

Room 6

Time: 16:00-17:30, 12 Aug, 2023
Session：ISC2
Session Chair: Xiaoyan Yin

16:00 PianoRF: A Portable and Light-Weight Piano System based on RFID

Wenlong Yan and Li Huang (Northwest University, China); Chen Liu (University of Victoria, Canada)

16:18 OTFS Waveform Design Based on WFRFT for Integrated Sensing and Communication

Zhenduo Wang, Zhipeng Liu, Shuai Hao and Xingyu Chen (Harbin Engineering University, China); Ruoyu Zhang (Ministerial Key Laboratory of JGMT, Nanjing University of Science and Technology, China)

16:36 Optimal Waveform Design Based on Concave - Convex Penalty Algorithm for DFRC System

Yujie Zhang and Feng Tian (Nanjing University of Posts and Telecommunications, China); Shao Zi Ling (Nanjing University of Posts and Telecommuncations & School of Communications and Information Engineering, China)

16:54 Integrated Sensing and Communication enabled Doppler Frequency Shift Estimation and Compensation

Jinzhu Jia, Zhiqing Wei, Zhang Ruiyun and Lin Wang (Beijing University of Posts and Telecommunications, China)

17:12 A Spatial Spectrum Estimation Algorithm for 3D Localization and Mapping in ISAC

Rongkang Zhou, Feng Tian and Xiao Zhao (Nanjing University of Posts and Telecommunications, China)

Room 7

Time: 10:30-12:00, 12 Aug, 2023
Session：CTS1
Session Chair: Xiaoming Yuan

10:30 The Capacity-Achieving Input of Optical Wireless Channels: The Number of Mass Points

Sufang Yang (Tsinghua University, China); Longguang Li (East China Normal University, Shanghai, China); Jintao Wang (Tsinghua University, China)

10:48 Statistical CSI-Based Transmission Design for RIS and DMA Assisted MIMO Communication System

Xiaojun Huang and Jun Zhang (Nanjing University of Posts and Telecommunications, China); Yu Han (Southeast University, China); Kaizhe Xu (University of Macau, China); Shi Jin (Southeast University, China); Shaodan Ma (University of Macau, China)

11:06 Distributed Beamforming For Small Cell Networks via Generalized Nash Equilibrium

Yuhe Chen (Southeast University, China); Leixin Han (National Mobile Communications Research Laboratory, Southeast University, China); Jiaheng Wang (National Mobile Communications Research Lab, Southeast University, China); Liang Xia (China Mobile Research Institute, China); Xiqi Gao (Southeast University, China)

11:24 A New JSCC Scheme for Transmission of Gaussian Sources Over AWGN Channels

Jifan Liang (Sun Yat-Sen University, China); Tingting Zhu (Sun Yat-sen University, China); Baodian Wei (Sun Yat-Sen University, China); Xiao Ma (Sun Yat-sen University, China)

Room 7

14:00 Secure Task Offloading and Resource Scheduling in Maritime Edge Computing Systems

Ying Wang, Yi Zheng and Jiahui Liu (Dalian Maritime University, China)

14:18 Personalized Federated Deep Reinforcement Learning-based Trajectory Optimization for Multi-UAV Assisted Edge Computing

Zhengrong Song (Nanjing University of Science and Technology, China); Chuan Ma (Zhejiang Lab, China); Ming Ding (Data 61, Australia); Howard Yang (ZJU-UIUC Institute & University of Illinois at Urbana Champaign (UIUC), China); Yuwen Qian (Nanjing University of Science and Technology, China); Xiangwei Zhou (Louisiana State University, USA)

14:36 Mobility-Aware Offloading Scheme for 6G's Real-Time Tasks with Temporal Graphs and Graph Matching

Jianhong Cai and Xiaorong Zhu (Nanjing University of Posts and Telecommunications, China)

14:54 Joint 3C Scheduling with Coordinated Multi-point Transmission

Zishuo You and Qiang Li (Huazhong University of Science and Technology, China); Ashish Pandharipande (Philips Research, The Netherlands); Xiaohu Ge (Huazhong University of Science & Technology, China); Ronghua Liu (Wuhan Jingce Electronic Group Company Limited, China); Min Shuai (Wuhan Jingli Electronic Technology Company Limited, China)

15:12 Efficient Federated Learning in Wireless Communication Systems: A Multi-Objective Optimization Perspective

Yu Zhou and Xiaohui Zhao (Xi'an Jiaotong University, China); Xuemei Liu (Tongji University, China); Lei You (Technical University of Denmark, Denmark); Lei Lei (Xi'an Jiaotong University, China)

Room 7

16:00 Resource Allocation and Computation Offloading for Delay Sensitive Large-scale Edge Tasks

Shuangle Xu (Changsha University of Science and Technology, China); Zhuofan Liao (Changsha University of Science & Technology, China); Weibo Hu (Changsha University of Science and Technology, China); Chaochao Feng (School of Computer, National University of Defense Technology, China)

16:18 Joint Optimization of Privacy Protection and Resource Allocation for Vehicular Edge Networks

Tianqi Gao, Hongfeng Tao, Yuanzhi Ni, Jun Shi and Fengcheng Jiang (Jiangnan University, China)

16:36 Delay-aware Resource Utilization Optimization for SFC Deployment in Heterogeneous Edge Computing

Qingli Xiong (Changsha University of Science and Technology, China); Zhuofan Liao (Changsha University of Science & Technology, China); Shuangle Xu (Changsha University of Science and Technology, China); Chaochao Feng (School of Computer, National University of Defense Technology, China)

16:54 Adaptive MAC Schemes in Dynamic MANETs: Parameter Adjustment versus Mechanism Combination on Real-time

Zhichao Zheng, Shengming Jiang and Xiang Zou (Shanghai Maritime University, China)

Ball Room

10:30 Blockchian Empowered Reliable Computation Offloading and Resource Allocation for Mobile Edge Computing Networks

Weiwei Yang (Dongguan University of Technology, China); Long Shi (Nanjing University of Science and Technology, China); Hui Liang (Dongguan University of Technology, China); Wei Zhang (The University of New South Wales, Australia)

10:48 A Unified Approach for Physical-layer Security over $\alpha-\eta-F$ and $\alpha-\kappa-F$ Fading Channels

Junhao Chen, Xiaoshi Liu and Weijun Cheng (Minzu University of China, China); Gaofeng Nie (Beijing University of Posts and Telecommunications, China)

11:06 A Sequential-Fairness RIS Deployment for Indoor Multi-User Systems

Qirui Chang and Gaofeng Nie (Beijing University of Posts and Telecommunications, China); Hui Tian (Beijng University of posts and telecommunications, China); GuoPeng Li and Bo Zhang (China Huaneng Yimin Open Coal Mine, China)

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11:24 A Novel 3D Wideband Geometry-Based Channel Model for Massive MIMO V2V Communications in Riverside Urban Road Environments

Yaning Chen (Beijing University of Post and Telecommunications, China); Nan Ma, Shaoyi Liu and Kaiheng Zhang (Beijing University of Posts and Telecommunications, China)

11:42 1-Bit Reconfigurable Intelligent Surface Element Design and its Equivalent Circuit Model

Xin Zhang (Shandong University, China); Jian Sun (ShanDong University, China); Liqiang Ma and Wensheng Zhang (Shandong University, China); Cheng-Xiang Wang (Southeast University, China & Purple Mountain Laboratories, China)

Ball Room

__Time: 14:00-15:30, 12 Aug, 2023__
__Session：WCS8__
__Session Chair: Chuan Lin__

14:00 Waveform Design for Communication-Assisted Sensing in 6G Perceptive Networks

Fuwang Dong, Fan Liu, Shihang Lu, Weijie Yuan and Yuanhao Cui (Southern University of Science and Technology, China); Yifeng Xiong (Beijing University of Posts and Telecommunications, China); Feifei Gao (Tsinghua University, China)

14:18 RIS-Aided Communications at 3.5GHz: Some Insights from Practical Measurement Results

Shun Zhang, Haoran Sun, RunZe Yu, Hongshenyuan Cui and Jian Ren (Xidian University, China); Feifei Gao (Tsinghua University, China); Shi Jin (Southeast University, China); Hongxiang Xie (Huawei Technologies Co., Ltd, China); Hao Wang (Hisilicon, Huawei, China)

14:36 Probe Selection Method based on Switch Matrix for 5G Massive MIMO Base Station OTA Testing

Jie Zhao, Nan Ma and Baoling Liu (Beijing University of Posts and Telecommunications, China)

14:54 Inter-Cell Interference Coordination for AirComp Federated Learning in Cellular Networks

Ranqiang Zhang and Na Deng (Dalian University of Technology, China); Haichao Wei (Dalian Maritime University, China)

15:12 Image Structural Similarity-Based Channel Similarity Analysis across Multiple Frequency Bands in the Office Campus Environment

Cheng Yi, Meng Zhao and Zhi Chen (Southeast University, China); Haiming Wang (Southeast University, China & Purple Mountain Laboratories, China)

Ball Room

__Time: 16:00-17:30, 12 Aug, 2023__
__Session：IOT2__
__Session Chair: Minghui Dai__

16:00 Freshness-aware Incentive Mechanism for Mobile AI-Generated Content (AIGC) Networks

Jinbo Wen and Jiawen Kang (Guangdong University of Technology, China); Minrui Xu and Hongyang Du (Nanyang Technological University, Singapore); Zehui Xiong (Singapore University of Technology and Design, Singapore); Yang Zhang (Nanjing University of Aeronautics and Astronautics, China); Dusit Niyato (Nanyang Technological University, Singapore)

16:18 FedAG: A Federated Learning Method Based on Data Importance Weighted Aggregation

Mengchu Xu, Yan Zeng, Meiting Xue, Ji-Lin Zhang and Jian Wan (Hangzhou Dianzi University, China); Mingyao Zhou (Huawei Enterprise Communication Technology Co, China); Yilin Wen and Yukun Shi (Hangzhou Dianzi University, China)

16:36 Enhancing User Experience in High-Resolution Collaborative Virtual Reality on Commodity Mobile Devices

Hongyuan Liang, Yuqi Li, Senyang Zhu, Liang Huang and Kaikai Chi (Zhejiang University of Technology, China)

16:54 Energy Efficiency and Spectral Efficiency Tradeoff in Multi-BD Symbiotic Radio Systems

Jinxin Wan (Chongqing University of Posts and Telecommunications, China); Yingying Guan and Jing Song (Northeastern University, China); Qingyang Song and Lei Guo (Chongqing University of Posts and Telecommunications, China)

17:12 Average AoI Minimization in WP-IoT Networks: Optimal Scheduling for NOMA Transmission

Shuang Li and Hong-Chuan Yang (University of Victoria, Canada); Fengye Hu (Jilin University, China)

Lobby (Poster Sessions)

__Time: 10:00-12:00, 12 Aug, 2023__
__Session：WCS9/10/11, NGN3, ISC3__

P3-1 Ray Tracing Based 6G RIS-Assisted MIMO Channel Modeling and Verification

Jialing Huang (Southeast University, China); Cheng-Xiang Wang (Southeast University, China & Purple Mountain Laboratories, China); Songjiang Yang and Yinghua Wang (Purple Mountain Laboratories, China); Yingjie Xu, Yingzhuo Sun and Jie Huang (Southeast University, China); Fu-Chun Zheng (Harbin Institute of Technology, Shenzhen, China & University of York, United Kingdom (Great Britain))

P3-2 On the Effect of BLER Requirement on Outer-Loop Link Adaptation

Shiyong Chen and Shengqian Han (Beihang University, China)

P3-3 Multi-IRS Assisted Multi-UAV Wireless Resource Allocation and Deployment Optimization

Lianwen Zhang and Zhiqun Hu (Beijing University of Posts and Telecommunications, China); Zhaoming Lu (BUPT, China); Yujing Zhang (Beijing University of Posts and Telecommunications, China)

P3-4 ADMM-Based Hybrid-Field Uplink Channel Estimation for Extremely Large-Scale MIMO Systems

Yiqing Li and Miao Jiang (Guangdong University of Technology, China)

P3-5 A New Variational Bayesian-based Radiation Source Positioning Method with Multistage Parameter Modification

Xuezhao Cai (Nanjing University of Aeronautics and Astronautics, China); Zhipeng Lin (NanJing University of Aeronautics and Astronautics, China); Yuqing Peng, Qiuming Zhu, Jie Wang, Xiaoxiang He, Qihui Wu and Kun Liu (Nanjing University of Aeronautics and Astronautics, China)

P3-6 Rate Adaptation with Correlated Multi-Armed Bandits in 802.11 Systems

Yuzhou Tong, Jiakun Fan, Xuhong Cai and Yi Chen (The Chinese University of Hong Kong, Shenzhen, China)

P3-7 Meta-Learning Based Semi-blind Data Detection for Cell-Free Systems

Guanyang Fu, Qing Wang, Rui Zhu and Haozhi Wang (Tianjin University, China)

P3-8 Jamming-Assisted Short Packet Covert Communications in Multi-Hop Wireless Networks

Zhengyu Yuan (Army Engineering University of PLA, China); Weiwei Yang (PLA Army Engineering University, China); Xingbo Lu (Army Engineering University of PLA, China)

P3-9 CS-LSTM: a hybrid channel estimation scheme in IDFT-VFDM system

Hongyu Yang (China); Yanzhao Hou, Chen Dong and Guoshun Nan (Beijing University of Posts and Telecommunications, China); Xiaodong Xu (Beijing University of Posts and Telecommunications & Wireless Technology Innovation Institute, China); Xiaofeng Tao (Beijing University of Posts and Telecommunications, China)

P3-10 Ray Tracing Based Channel Modeling and Characteristics Analysis in 6G IIoT scenarios

Yuxiao Li (Southest University, China); Li Zhang (Southeast University, China); Cheng-Xiang Wang (Southeast University, China & Purple Mountain Laboratories, China); Fu-Chun Zheng (University of York, United Kingdom (Great Britain) & Southeast University, China); Songjiang Yang and Yinghua Wang (Purple Mountain Laboratories, China); Jie Huang (Southeast University, China)

P3-11 Learning-Based Latency and Energy Optimization in SCMA-Enhanced UAV-MEC Networks

Pengtao Liu (National University of Defense Technology, China); Jing Lei (National University of Denfense Technology, China); Wei Liu (National University of Defense Technology, China)

P3-12 A New Spectrum Map Fusing Method Based on Difference Group Sparsity

Kun Liu (Nanjing University of Aeronautics and Astronautics, China); Zhipeng Lin (NanJing University of Aeronautics and Astronautics, China); Yuchao Liu (China Research Institute of Radiowave Propagation, China); Qiuming Zhu, Qihui Wu and Xuezhao Cai (Nanjing University of Aeronautics and Astronautics, China)

P3-13 A General 3D GBSM for 6G Indoor Optical Wireless Communication Systems

Xiuming Zhu and Jun Wang (Southeast University, China); Rui Feng (Purple Mountain Laboratories & Southeast University, China); Jie Huang (Southeast University, China); Cheng-Xiang Wang (Southeast University, China & Purple Mountain Laboratories, China)

P3-14 Path Planning Based on Traffic Flow Prediction for Vehicle Scheduling

Lei Mo and Yiming Zhao (Southeast University, China); Ji Liu (Baidu Research, China)

P3-15 LEAM: A Large-scale Events Aware Module for Multi-step Intercity Flow Prediction

Qihao Huang and Chao Li (Zhejiang University, China); Mincheng Wu (Zhejiang University of Technology, China)

P3-16 Fairness-aware Location and Hybrid Beamforming Optimization in IRSs-aided Cell-free MIMO System

Wang Kewei (Nanjing University of Aeronautics and Astronautics

& College of Electronic and Information Engineering, China); Nan Qi (Nanjing University of Aeronautics and Astronautics, China & KTH Royal Institute of Technology, Sweden); Ming Xiao (Royal Institute of Technology, Sweden); Sha Hu (Huawei Lund Research Center, Sweden); Björn Sihlbom (Huawei Technologies Sweden AB, Sweden)

P3-17 A Routing Scheme Based on Multi-Objective Optimization in Quantum Satellite Networks

Miao Zhao and Na Deng (Dalian University of Technology, China); Haichao Wei (Dalian Maritime University, China)

P3-18 WVGR: Gesture Recognition based on WiFi-Video Fusion

Zixin Dai, Shuangjiao Zhai, Pinle Qin, Rui Chai and Pengcheng Zhao (North University of China, China)

P3-19 Optimal Sensing Time Design in ISAC-enabled Vehicular Network

Bai Zhiyue (University of Macau, China); Fen Hou (University of Macau, Macao); Hangguan Shan (Zhejiang University, China)

P3-20 Intelligent reflecting surface aided robust secure integrated sensing and communication systems

Xin Chen (Xi'an Jiaotong University, China); Tong-Xing Zheng (Xi'an Jiaotong Unviersity, China); Xinji Wang (Xi'an Jiaotong University); Umar Zeb (Xian Jiaotong University, China); Xiaoyan Hu (Xi'an Jiaotong University, China); Chaowen Liu (Xi'an University of Posts and Telecommunications, China); Yi He (National University of Defense Technology, China)

P3-21 EarAE: An Autoencoder based User Authentication using Earphones

Yuli Wu and Jing He (Northwest University, China)

P3-22 Bayesian CFAR Detector in Weibull Clutter via Interference Control

Xinchao Zhu (Zhejiang University, China); Chaoqun Yang (SouthEast University, China); Chengwei Zhou and Zhiguo Shi (Zhejiang University, China)

P3-23 An Indoor NLOS Identification and Extraction Algorithm Based on Multi-dimensional Data Correlation

Xinrui Zhang and Jin Xu (Beijing University of Posts and Telecommunications, China)

Lobby (Poster Sessions)

__Time: 15:30-17:30, 12 Aug, 2023__
__Session：MWN7, MUC3/4, SPC5/6__

P4-1 Ray-Tracing Based Large Indoor Office Base Station Deployment Optimization at Millimeter Wave Bands

Dantong Chen (Nanjing University of Aeronautics and Astronautics, China); Songjiang Yang and Yinghua Wang (Purple Mountain Laboratories, China); Jie Huang (Southeast University, China); Cheng-Xiang Wang (Southeast University, China & Purple Mountain Laboratories, China); Qiuming Action (Nanjing University of Aeronautics and Astronautics, China)

P4-2 Maximum Key-based Joint Topology Construction and Routing over Quantum Satellite Networks

Miao Zhao and Na Deng (Dalian University of Technology, China); Haichao Wei (Dalian Maritime University, China); Nan Zhao (Dalian University of Technology, China)

P4-3 Flexible Link Adaptation in Fully-Decoupled RAN: A Machine Learning Approach

Xianfeng Zou, Jiwei Zhao and Kai Yu (Nanjing University, China); Jiacheng Chen (Peng Cheng Laboratory, China); Haibo Zhou (Nanjing University, China); Sherman Shen (University of Waterloo, Canada)

P4-4 A Physical-Layer Key Generation Scheme for Non-Square Channel Matrices Based on PMI

Haixi Sun, Guyue Li, Haoyu Li and Hu Aiqun (Southeast University, China); Yexia Cheng, Ye Tian and Shen He (China Mobile Research Institute, China)

P4-5 Maritime Search and Rescue Leveraging Heterogeneous Units: A Multi-Agent Reinforcement Learning Approach

Chengjia Lei (Harbin Institute of Technology, Shenzhen & Peng Cheng Laboratory, China); Shaohua Wu (Harbin Institute of Technology, China); Yi Yang and Jiayin Xue (Peng Cheng Laboratory, China); Qinyu Zhang (Shenzhen Graduate School, Harbin Institute of Technology, China)

P4-6 Exploiting the Collision-Free Region with Slotting Access for Data-Gathering in the Linear UANs

Yan Wang, Fei Ji, Quansheng Guan and Hao Zhao (South China University of Technology, China); Weiqi Chen (Guangdong University of Finance, China)

P4-7 Computation Offloading for Dependency Task in MEC-Enabled MIoT

Cong Wang, Xiaopei Chen, Jianjie Yang, Wenhao Wu, Pingping Chen and Zhijian Lin (Fuzhou University, China)

P4-8 Anti-jitter Beamforming Design for UAV-Assisted Maritime Monitoring Networks

Yongchun Han and Bin Lin (Dalian Maritime University, China); Lin Liu (Dalian, China)

P4-9 A Parallel-Transmission Enhanced Random Time Slot MAC Protocol for UASNs

Zheng Fu, Yan Wang, Fangjiong Chen, Quansheng Guan and Hua Yu (South China University of Technology, China)

P4-10 Energy-Efficient and Link-Stability based Ant Colony Optimization Routing Protocol for Underwater acoustic Networks

Xuewen Liao and Xuan Geng (Shanghai Maritime University, China)

P4-11 Efficient Trajectory Planning for UAV-Relaying Maritime Communication Systems

Donghu Chen, Jiale Zhong, Yingdong Hu, Ye Li and Jue Wang (Nantong University, China)

P4-12 A Real-Time 3D Data Visualization System for Underwater Wireless Sensor Networks

Bingwen Huangfu, Jiani Guo and Shanshan Song (Jilin University, China); Jun Liu (Beihang University & Smart Ocean Technology Co., Ltd, China); Jun-Hong Cui (University of Connecticut & Jilin University, USA)

P4-13 A Maximum Flow Routing Algorithm for Multi-Unmanned Surface Vessel Networks

Haocheng Wang and Bin Lin (Dalian Maritime University, China); Lin X. Cai (Illinois Institute of Technology, USA); Xiaoling Han (Dalian Maritime University, China)

P4-14 A DenseNet-Based Learning Framework Toward Maritime End-to-End Autoencoder Communication Systems

Shuai Shao, Bin Lin, Nan Wu and Xiaoling Han (Dalian Maritime University, China)

P4-15 OFDR Spatial Resolution Optimization Using Equal Sampling and Gaussian Fitting Method

JingCheng Shi, Xu Guo, Zhongbo Miao and Jianjun Wu (Peking University, China)

P4-16 Directional modulation based dual function radar-communication design

Zichao Zhuang (Tianjin Normal University, China)

P4-17 Deep Learning Based CSI Feedback Method Exploiting Channel Correlation in Massive MIMO

Jingyuan Yu (BUPT, China); An Chen and Wenbo Xu (Beijing University of Posts and Telecommunications, China)

P4-18 Cross-modal Semantic Communications in 6G

Mingkai Chen, Minghao Liu, Wenjun Wang, Haie Dou and Lei Wang (Nanjing University of Posts and Telecommunications, China)

P4-19 Sparsity Prediction-based Deep Compressed Sensing for MEC-enabled IoT Systems

Jingyu Zhang, Yiqin Deng and Haixia Zhang (Shandong University, China); Xianhao Chen (University of Hong Kong, China)

P4-20 Secure Computation Offloading for IRS-Assisted Mobile Edge Computing Networks

Mengru Wu (Zhejiang University of Technology, China); Weijin Chen (& Zhejiang University of Technology, China); Kexin Li and Liping Qian (Zhejiang University of Technology, China)

P4-21 MI-based Joint Source Channel Coding for Wireless Image Transmission

Ningwei Huang, Wenhui Hua and Lingyu Chen (Xiamen University, China)

P4-22 LSTM-embedding Transformer model for LoS/NLoS recognition in indoor localization

Lucong Chen, Chao Dong and Kai Niu (Beijing University of Posts and Telecommunications, China); Qiubin Gao (CICT Mobile Communication Technology, China); Yongqiang Fei and Yuwan Su (CICT Mobile Communications Technology, China)

P4-23 EFK localization method in NLOS environment based on residual discrimination

Jin Wang (Xi'an University of Posts and Telecommunications, China); Xiyi Dong (Xi'an University of Posts and Telecommunications, China); Yan Xing (National Time Service Center, China); Shaoqing Lv (Xi'an University of Posts and Telecommunications, China); Pengwu Wan (XI'AN University of Posts&Telecommunications, China)

Acronym	Technical Session Theme	#Sessions
AIN	AI-for-Network and Network-for-AI	6
CEC	Cloud and Edge Computing	3
CIS	Communication and Information Security	5
CTS	Communication Theory	2
ISC	Integrated Sensing and Communication	3
IOT	Internet of Things	4
MUC	Maritime and Underwater Communication	4
MWN	Mobile and Wireless Networks	7
NGN	Next Generation Networking	3
SPC	Signal Processing for Communications	6
SAG	Space-Air-Ground Communication and Networking	6
WCS	Wireless Communications	11

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