VTC2026-Spring Accepted Paper List

Antenna Systems, Propagation, and RF Design Papers

49145

1 A D-band CMOS Beamforming Receiver Module with Linearly Arranged Antenna
Sunwoo Kong, ETRI

30027

2 A Novel 3D GBSM for STAR-RIS Assisted Integrated Sensing and Communication Systems
Zayyad Haleed, Qun Wu, Jie Huang, Cheng-Xiang Wang, Southeast University

33218

3 Design and Characterization of S band Power amplifier
Rahul Sadhu, Bharat Electronics Limited

52367

4 Log-Mu Fading Process: Second-Order Statistics for Diversity-Combining Techniques
Godfred Kumi Tenkorang, Michel Yacoub, State University of Campinas

68896

5 MIMO- and Bandwidth-Aware Path-Loss Modeling for 2.4, 5, and 6 GHz Indoor Wi-Fi
Erma Perenda, Adtran Networks SE; Martin Kuipers, Adtran Network SE

87697

6 Training-Free Constraint-Guided Diffusion for One-Shot Path Loss Map Estimation
Yuuki Tachioka, Denso IT laboratory

44751

7 A Low-Profile Circularly Polarized Filtering Folded Transmitarray Antenna for Vehicular Communication Based on Metasurface
Qingsong Jia, Linman Zhang, Xi Ran, Tingting Wang, Qianyuan Laboratory

61854

8 Integrated Antenna Performance Design by Utilizing Born Iteration Method
Xi Ran, Tingting Wang, Cun Wang, Qingsong Jia, Jiaqi Xing, Qianyuan Laboratory

52314

9 Sparse Selection of Natural Modes from the Cross-Spectral Density Tensor of an RF Multiport System for Indoor Device-Free Multi-Human Counting
Frank Ebong, Andrea Tonello, University of Klagenfurt

37325

10 Adaptive Channel Estimation for Movable Antenna Systems Based on Bayesian Compressive Sensing
TianQiu, Haihong Sheng, Pengcheng Zhu, Southeast University; Kui Xu, Lei Zhu, Army Engineering University of PLA

36306

11 A Port-efficient Array Manifold Design Enabling Maximal Full-space Spatial Multiplexing
Guohao Liu, Tsinghua University; Jun Luo, Lin Peng, Min Fang, ZTE Corporation; Zhi Sun, Tsinghua University

Emerging Technologies, 6G and Beyond Papers

78066

1 Antenna-Port Adaptation with One-Shot CSI Reporting for 6G MIMO Energy Saving
Fan Wang, Xiaolin Hou, DOCOMO Beijing Communications Laboratories Co., Ltd; Xiang Li, Chen Lan, DOCOMO Beijing Communications Laboratories Co., Ltd.

52978

2 AoA-based V2X Localization with Robust Batch Initialization and Extended Kalman Filter in Urban Digital Twin
Jin Nakazato, Kazuki Maruta, Mikio Hasegawa, Yuki Sasaki, Tokyo University of Science; Rui Dinis, Universidade Nova de Lisboa

33729

3 Bistatic Lane Detection in a Highway Entry Scenario using Maximum a Posteriori Estimation
Jan-Steffen Gröneweg, Soheil Gherekhloo, Robert Bosch GmbH; Maximilian Lübke, Friedrich-Alexander-Universität Erlangen-Nürnberg; Norman Franchi, Friedrich-Alexander-University, Erlangen-Nurnberg (FAU)

75093

4 Conductor: A Job-driven and Network-Aware Scheduling Mechanism for Profit-Maximizing Geo-Distributed Training
Hao Jiang, Shanghai Jiao Tong University; Meng Qin, Peng Cheng Laboratory; Yuqian Ren, Zhiguo Shi, Zhejiang University; Dandan Liang, Peng Cheng Laboratory

58802

5 Design and Prototype Validation of Multi-Node Cooperative Sensing for Target Trajectory Tracking
Jianzhi Li, Baolong Chen, Shengli Ding, Dajie Jiang, vivo Mobile Communication Co., Ltd.

37985

6 DQN-Based LDPC Kernel Launch Mode Control for Resource Efficiency Enhancement in NVIDIA cuPHY PUSCH Receiver Processing
Hyebin Cho, Electronics and Telecommunications Research Institute (ETRI); Kakyeom Jeon, Jee-Hyeon Na, Nam-I Kim, Electronics and Telecommunications Research Institute

40869

7 Energy-Efficient RIS-aided Uplink Cell-Free Massive MIMO?NOMA
Mohamad Ousseily, Joumana Farah, INSA Rennes; Matthieu Crussière, Institute of Electronics and Telecommunications of Rennes; Joseph Doumit, IMT Atlantique Bretagne-Pays de la Loire; Charbel Abdel Nour, IMT Atlantique; Eric Pierre Simon, University of Lille

10812

8 Energy model for Integrated Sensing and Communication 5G NR Base Stations
Esther Guerin, National Institute of Standards and Technology

44025

9 Feedback-Free Jamming Cognition for ISAC
Zhenyao He, Ying Liu, Yusi Zhang, National University of Defense Technology; Hong Shen, Wei Xu, Southeast University

56354

10 Fully Asynchronous Semi-Decentralized Federated Learning with Markov Chain Client Updates

Changheng Wang, beijing university of posts and telecommunications; Xianchao Zhang, Jiaxing University; Zhiqing Wei, Beijing University of Posts of Telecommunications; Lingzhu Zhao, Northwestern Polytechnical University; FENG Zhiyong, Beijing University of Posts and Telecommunications

45800

11 Fully Asynchronous Unsourced Random Access over Fading Channels

Mert Ozates, IHP; Mohammad Kazemi, Imperial College London; Gianluigi Liva, DLR (German Aerospace Center); Deniz Gunduz, Imperial College of London

82439

12 Hybrid TRP?UE Sensing for Enhanced Target Localization

Necati Kagan ERKEK, Marco Di Renzo, King's College London; Arman Shojaeifard, Yasser Mestrah, Remun Koirala, Mohammad Heggo, Kunjan Shah, InterDigital

85480

13 Implementation of an AI-RAN Integrated 28 GHz mmWave FPGA OFDM Transceiver: GPU Accelerated Channel and Phase Noise Estimation

Suhyun Kim, Kaewon Choi, Sungkyunkwan University

21990

14 Intelligent Network System: Service Provisioning Using AI-Agents

Chetna Singhal, Inria; Yassine HADJADJ AOUL, University of Rennes

13130

15 Low-Complexity Near-Field Location Sensing Using Block Sparse Bayesian Learning in Extremely Large-Scale mmWave/Sub-THz Systems

Dr. Qian Wan, University of Macau; Xiaopeng Huang, Eastcompeace Technology Co., Ltd; Xiaoguang Zhang, China Gezhouba Group NO.2 Engineering Co., Ltd; Xinping Li, Wuhan University of Technology; Yuan Wu, University of Macau

58261

16 Machine Learning-Based Terrestrial-Satellite Vertical Handover for 6G and Beyond Networks

Ma?gorzata Wasilewska, Pozna? University of Technology; Michal Sybis, Poznan University of Technology

16901

17 Meta-Learned Routing in Dynamic LEO Satellite Networks: A Discovering Reinforcement Learning Approach

Yuzheng Ren, Yangyang Hu, Haijun Zhang, Yuxin Luo, University of Science and Technology Beijing; Fei Richard Yu, Carleton University; Xueyan Cao, Inner Mongolia University

75123

18 Model-Alignment Personalized Federated Learning: Tackling Gradient Conflict for Fast Convergence

Tingting Liu, Shaopeng Dong, Beihang University; Chenyang Yang, Beihang University, Beijing

68181

19 Network-Co-Designed Dynamic Sparsification for Dependable Distributed Robot Learning over 3GPP Networks

Géza Szabó, Boldizsár Bunda, Ericsson Ltd.

89284

20 NF-TrackLLM: Joint Prediction of UAV Trajectory and Near-Field Beam for LAE XL-MIMO Systems

Qianfan Lu, Mengyuan Li, Jiachen Tian, Yu Han, Xiao Li, Southeast University; Shi Jin, Southern University

57504

21 Online Minibatch Size Assignment for Federated Learning with Heterogeneous and Uncertain Delay

Linglin Kong, Hong Kong Metropolitan University; Chi Wan Sung, City University of Hong Kong; Ho Yuet Kwan, Hong Kong Metropolitan University,

29819

22 ProLaB xApp: Proactive Latency Bounds for Reliable and Self-Adapting Open RAN 6G Networks

Andrea Nota, Technische Universtaet Dortmund; Niklas A. Wagner, Robin Wiebusch, Christian Wietfeld, TU Dortmund University; Selma Saidi, Technische Universität Braunschweig

19025

23 Quantum-Regularized Hybrid Beamforming for Next-G Metasurfaces

Shikhar Bhattarai, Dn Pokhrel, Hyuck M. Kwon, Wichita State University

26454

24 Ray Tracing-Enabled Digital Twin for RIS Phase Optimization: Implementation and Experimental Validation

Ömer Lütfü Karakelle, Sefa Kayrakl?k, TÜB?TAK B?LGEM; ?brahim Hökelek, TÜB?TAK; Ali Gorcin, Istanbul Technical University; Halim Yanikomeroglu, Carleton University

43347

25 Realization of a Fully Connected Neural Layer Over-the-Air through Multi-hop Amplify-and-Forward Relays

Tolga Girici, TOBB University of Economics and Technology; Meng Hua, imperial college london; Deniz Gunduz, Imperial College of London

75810

26 Secrecy Optimization with ISAC-Enabled Cooperative Jamming for Vehicular URLLC

Emmanouel T. Michailidis, Ioannis Voyiatzis, Nikos Miridakis, University of West Attica

61802

27 A Fast Partition Optimization for Magnitude-Selective Affine Function-Based Digital Predistortion

Daeyoung Kim, Samsung electronics; Hyunseok Yu, Joohyun Do, Hui Won Je, Jungwon Lee, Samsung Electronics

70268

28 Adaptive KVCache Compression and Streaming for Cross-WAN PD Disaggregated LLM Inference

Jiaqian Man, Jia Chen, Beijing Jiaotong University; Chengxiao Yu, Peng Cheng Laboratory; Xu Huang, Chenxi Liao, Dongsheng Qian, Shang Liu, Beijing Jiaotong University; Bohua Xu, Dongyue Zhang, China Unicom

73731

29 A General EM-Based Channel Model for Reconfigurable Antenna Systems

Chen XU, Xianghao Yu, City University of Hong Kong

42771

30 CARL: A CRB-Aware Rank-1 Leakage Algorithm for BFI-based Occupancy Sensing

Zhiyuan He, Zhenyu Ruan, Shanyi Ke, Desheng Wang, Huazhong University of Science and Technology; Mahmoud M. Salim, King Fahd University of Petroleum and Minerals; Zhijun Wang, Zhiben Zhang, FiberHome Telecommunication Technologies Co., Ltd

62207

31 Code-Aided Channel Estimation for Metasurface-Based Holographic MIMO

Roberto Câmara Gentil Porto, Pontifícia Universidade Católica do Rio de Janeiro; Rodrigo C. de Lamare, Pontifical Catholic University of Rio de Janeiro, Brazil

75620

32 Deep Learning-Based Fractional Time-Frequency Synchronization for OTFS Systems in Delay-Doppler Domain

Meiwen Men, Tao Zhou, Kaifeng Bao, Beijing Jiaotong University; Zhiyang Guo, University of Science and Technology of China; LiuLiu, Beijing Jiaotong University

88918

33 Disentangled Representation Learning for User Localization in Dual-Polarized Systems

Shuwen Yu, Wei Xu, Southeast University; Wei Shi, Purple Mountain Laboratories; Derrick Wing Kwan Ng, University of New South Wales; Naofal Al-Dhahir, University of Texas at Dallas

91114

34 End-to-End Gesture Recognition from Raw mmWave Radar Signals with Preprocessing Network

WenboJi, Lingxiang Li, University of Electronic Science and Technology of China; Zhen Wang, Southwest Petroleum University; Zhi Chen, University of Electronic Science and Technology of China

27864

35 Energy-Efficient UAV-assisted LoRa Gateways: A Multi-Agent Optimization Approach

Abdullahi Isa Ahmed, University Mohammed VI Polytechnic; Jamal Bentahar, Khalifa University; El Mehdi Amhoud, Mohammed VI Polytechnic University

91440

36 Entropy-Based Symbol Scheduling Considering CSI Aging in MIMO DeepJSCC

Goki Sawada, Shion Inokuma, Tokyo University of Science; Daisuke Hisano, Osaka University; Kazuki Maruta, Tokyo University of Science

36329

37 GNN-Assisted Handover Measurement Reduction in 5G Networks Using Geolocation Information

Wei-Han Zheng, National Central University; Sheng-Shih Wang, Lunghwa University of Science and Technology; Shiann-Tsong Sheu, National Central University

33132

38 Imaging-based spectral estimation for multi-target DoA with a single Rydberg receiver

Liangcheng Han, Haifan Yin, Huazhong University of Science and Technology; M'erouane Debbah, KU 6G Research Center, Khalifa University of Science and Technology

36694

39 ISAC Performance Trade-off Through a Unified Information-Theoretic Metric

Jiebo Shuai, Xiping Wu, Cheng-Xiang Wang, Southeast University

42228

40 Joint Task Offloading and Resource Optimization for MIMO-OFDM Vehicular Networks with Integrated Sensing, Computing, and Communication

Ming-Hsiang Ku, Ming-Chun Lee, Yu-Chih Huang, National Yang Ming Chiao Tung University

27759

41 Joint Time Scheduling and Reflection Control for Secure and Fair Symbiotic Communication

Chi Jin, University of Jyvaskyla; Mingan Luan, Northeast Normal University; Fengye Hu, College of Communication Engineering, Jilin University; Byungjin Cho, Korea University; Ilkka Pölönen, University of Jyvaskyla; Zheng Chang, University of Jyväskylä

40363

42 Low-Complexity Hierarchical Rate Splitting with Null Space Projection Based Precoding Design

Hanlin Zhang, Shuping Dang, Simon Armour, University of Bristol

12177

43 Meta-Learning-Enabled Multi-Agent Reinforcement Learning for Joint Deployment, Orientation, and Resource Optimization in Hardware-Impaired Multi-RIS Systems

Po-Chen Wu, Chih-Yuan Kao, Yu-Ting Li, Kai-Ten Feng, National Yang Ming Chiao Tung University; Zhi Ding, University of California at Davis; Jen-Ming Wu, Hon Hai Research Institute

80081

44 OpenPathNet: An Open-Source RF Multipath Data Generator for AI-Driven Wireless Systems

Lizhou Liu, Xiaohui Chen, Wenyi Zhang, University of Science and Technology of China

48530

45 Optimization of Metasurface-Based Reconfigurable Antenna in Cellular Network Uplink

Yaser Dorrazehi, Anna Valeria Guglielmi, University of Padova; Stefano Tomasin, University of Padua

40225

46 Optimization of Receiver Buffer Control for Reducing Delay and Jitter in E2E Communication

Ibuki Ikeda, Tokyo University of Science; Koji Oshima, Homare Murakami, Atsushi Wakayama, National Institute of Information and Communications Technology; Kazuo Ibuka, National Institute of Imformation and Communications Technology; Jun Hwan Huh, Tokyo University of Science; Maki Arai, Shibaura Institute of Technology; Jin Nakazato, Mikio Hasegawa, Tokyo University of Science

15235

47 Pervasively Correlated Channel Model for RIS-Assisted MIMO Systems

Zi?ang Wang, Jian Sang, Chenhong Yang, Xiao Li, Wankai Tang, Southeast University; Shi Jin, Southern University; Haiming Wang, Southeast University

65444

48 RadioVLM: Vision-Language Model for Accurate and Efficient Radio Map Prediction

Yuxuan Li, Southeast University; Kunyang Sun, China University of Mining and Technology; Zhenyu Tao, Southeast University; Wen Wang, Purple Mountain Laboratories; Yongming Huang, Xiaohu You, Southeast University

25756

49 Relay-Assisted ISAC Networks: Secrecy, Reliability, and Detection Insights

Claire Naiga Serugunda, Angela Doufexi, Robert Piechocki, University of Bristol

74925

50 Resource Optimization for Movable Antenna-Enabled Near-Field OFDM ISAC Systems

Qingxia Feng, Southeast University; Meng Hua, imperial college london; Chunguo Li, Southeast University, Nanjing, China; Yongming Huang, Luxi Yang, Southeast University

57706

51 Secure Multi-Device Edge Inference through MCR2-Based ISCC Optimization

Jiacheng Yao, Southeast University; Guangxu Zhu, Shenzhen Research Institute of Big Data; Wei Xu, Southeast University; Wei Shi, Purple Mountain Laboratories

36416

52 Shadowing-based Sensing of Mobile Blockers via Dual-Beam RIS Scanning of Ambient mmWave Radio Sources

Tan-Tho LUC, University of Grenoble Alpes, CEA-Leti; Francesca Costanzo, Antonio Clemente, CEA-Leti; Benoît Denis, CEA-Leti Minatec

35021

53 Spectral Efficiency Analysis of Repeater-Assisted Massive MIMO Systems
Pengzhe Xin, Dongming Wang, Wanqing Cao, Pengcheng Zhu, Yongming Huang, Southeast University

44360

54 Tensor-Based Channel Estimation for RIS-Assisted Mobile Communication Systems
Jiawei Ma, Hao Liu, Yuxing Lin, Xiao Li, Shi Jin, Southeast University

19583

55 Transceiver Design for Wideband MIMO-OFDM ISAC Systems
Yating Chen, Southeast University; Cai Wen, Northwest University; Jie Li, Nanjing University of Aeronautics and Astronautics; Wenjin Wang, Yan Huang, Southeast University

65482

56 Transmit Precoder Optimization for Bistatic ISAC Scenario
Pedro Victor Martins Castro, Federal University of Ceará; Walter Cruz, UFC; Francisco Rodrigo Porto Cavalcanti, Wireless Telecom Research Group (GTEL), Federal University of Ceara

57585

57 Joint Trajectory and Resource Optimization for Spectral Efficiency and Fairness in NOMA-UAV Networks via DRL
Benmeziane Imad-Ddine Ghomri, University of Tlemcen; Hmaied SHAIEK, CNAM

IoT, M2M, Sensor Networks, and Ad-Hoc Networking Papers

62004

1 A Blockchain based Audit System for Secure and Traceable Vehicle-to-Everything Communications
Marwa Slimene, Amira Chriki, Centre Inria de l'Université de Lille; Nathalie Mitton, INRIA Lille Nord Europe; Patrick Sondi, Ahmed Meddahi, Center for Digital Systems IMT Nord Europe

19534

2 A Dual-Stream Temporal Feature Fusion Network for Multi-Class Traffic Flow Prediction
Abia Abraham, Saintgits College of Engineering (Autonomous), Kottayam, India; Rahul Biju, Deepak Gangadharan, International Institute of Information Technology, Hyderabad

81665

3 Data-Driven and Energy-Aware Federated Learning Design with Highly Mobile Clients
Selman Sezgin, Orange; Kahina Mokrani, Orange Labs; Julien Jacques, Université Lumière Lyon 2; Sylvain Allio, Orange Labs

99245

4 Experimental Evaluation of LPWAN Technologies: mioty, LoRaWAN, Sigfox, NB-IoT, and LTE-M in Deep Indoor Environments
Christof Roehrig, Benz Cramer, FH Dortmund

48542

5 GeoOpt: Mitigating the Geographic Routing Memory Effect in Sparse LDACS Air-to-Air Networks
Musab Ahmed, Konrad Fuger, Koojana Kuladinithi, Andreas Timm-Giel, Hamburg University of Technology

75472

6 Mission-Aware QoS for Multi-UAV-Aided Wireless Powered Sensor Networks
Shuwei Qiu, Hanshan Normal University; Yiu-Wing Leung, Hong Kong Baptist University

24725

7 MKES: A MEC-Enabled Proximity-Based Keyless Entry System
Sukhminder Singh, IIT ROPAR; Sudeepta Mishra, IIT Ropar

93366

8 Performance of SCHC Compression in 5G Using Real-World Data
Amina, Alexander PELOV, Laurent TOUTAIN, IMT Atlantique / IRISA; Xavier Lagrange, IMT Atlantique, IRISA; Yandi LIU, Romain négrier, Fabien courreges, XLIM / University of Limoges

72267

9 Robust Hybrid Graph Filtering for Wireless Traffic Prediction in V2X Networks
Jiayin Zhang, Tingting Zhang, Haoyang Li, Nan Wu, Beijing Institute of Technology; Mehul Motani, National University of Singapore

93826

10 Semantic-Aware Task Offloading for Embodied Agents in Edge-Enabled IoT Networks
Ernest Tan, Singapore Institute of Technology; A.S. Madhukumar, Nanyang Technological University

76088

11 Toward Robust Routing in UAV Networks: The HRC-QMIX Framework for Cooperative Multi-Agent Forwarding
Wenjing Wei, Harbin Institute of Technology; Tianyu Wang, QiYuan Lab; Hanze Liu, Hu Wang, Xinran Zhou, Zhutian Yang, Harbin Institute of Technology

41602

12 CERBERUS: A Self-Sovereign Identity-based Authorization Framework for Autonomous Vehicle
Calogero Turco, University Of Pisa; Marco De Vincenzi, IIT CNR; Andrea De Salve, ISASI-CNR; Ilaria Matteucci, Paolo Mori, IIT-CNR; Laura Emilia Maria Ricci, University Of Pisa

92598

13 Enabling Error-Resilient Decoding in Wake-up Radio: Design, Implementation, and Experiments
Kenneth Østerhus, Svein Andreas Valland, Geir Jevne, Frank Y. Li, University of Agder

29036

14 Large Language Models for Temporal Sensor Networks: Graph-Constrained Multi-LLM Ensembles via Structural Causal Models
Franck Junior Aboya Messou, Zihan Zhao, Hosei University; Jinhua Chen, Hosei University, Japan; Shilong Zhang, Hosei University; Tong Liu, Hosei University, Japan; Weiyu Wang, Keping Yu, Hosei University

44454

15 Leveraging Cyclostationary Features and Continual Learning for Robust RF Fingerprinting in IoT and UAV Networks
Nordine Quadar, Abdellah Chehri, Royal Military College of Canada; Benoit Debaque, Thales Digital Identity and Security

31424

16 Long-term useful data rate optimization of batteryless devices powered by intermittent energy sources
Alexis Vilain, Nantes Université; Rim El-Achi, Nantes University; Jean-François Diouris, Université de Nantes; Guillaume Andrieux, Nantes Université; Sébastien Pillement, Nantes University

50311

17 Real-Time State Monitoring via Linear Estimation for Wide-Sense Stationary Processes
Ken Miyamoto, University of Osaka; Yoshiaki Inoue, Tetsuya Takine, Osaka University

20547

18 Reliable Time-Aware Flow Scheduling for TSN-5G Networks via Improved White Shark Optimizer
Zhuohang Li, University of Chinese Academy of Sciences; Chong Tan, Jiahui Mao, Shanghai Institute of Microsystem and Information Technology CAS; Chunlei Zheng, Shanghai Institute of Microsystem and Information Technology; Hong Liu, Min Zheng, Shanghai Institute of Microsystem and Information Technology CAS

11020

19 Resource Allocation for UAV-Assisted Vehicular Edge Computing: A Hybrid DDPG Framework
Jun Cui, Shubin Wang, Gerile Ge, Xueyan Cao, Inner Mongolia University

99714

20 To Update or Not: Adaptive Strategies for Time-Varying Update Delays in Edge Networks
Xiaohui FAN, Chenhui Tao, Wanlu Zhang, Harbin Institute of Technology, Shenzhen; Jingjing Luo, Fu-Chun Zheng, Harbin Institute of Technology (Shenzhen); Lin Gao, Harbin Institute of Technology

38869

21 Floating Wireless Sensor Node Design and Experimental Validation for Large Water Bodies
Moeen Ahmad Azam, Talha Manzoor, Naveed Ul Hassan, Lahore University of Management Sciences

28452

22 Joint Design of Content Placement and Update in D2D-assisted Caching Networks
Xuewei Zhang, Zhe Chen, Xi'an University of Posts and Telecommunications; Yuan Ren, Xi?an University of Posts and Telecommunications

Machine Learning for Communications Papers

78098

1 Acceleration of MU-MIMO Proportional Fairness Scheduling using a Neural Network with Variable-User Support
Achille Jacquemond, Fujitsu Limited; Natsuki Morita, Fujitsu limited; Masatoshi Ogawa, Fujitsu Limited

76851

2 Attention-Driven SIC for Massive MIMO Detection Under Imperfect CSI
Toluwaleke Olutayo, Benoit Champagne, McGill University

26459

3 Dual-Timescale Deep Reinforcement Learning for Service Caching and Offloading in AAV-Assisted MEC Networks
Qian Liu, Qimin Liu, Zhenggang Zhou, Qilie Liu, Chongqing University of Posts and Telecommunications

83948

4 Experimental Evaluation of Downlink Throughput Prediction Technology Utilizing Base Station Data in Public Cellular Systems
Keisuke Wakao, NTT

32385

5 FACE: A Feature-Aware Channel Estimator for SRS-Based Channel Estimation in 5G NR
Kakyeom Jeon, Electronics and Telecommunications Research Institute; Hyebin Cho, Electronics and Telecommunications Research Institute (ETRI); Jee-Hyeon Na, Nam-I Kim, Electronics and Telecommunications Research Institute

38952

6 FSAE-MSC: A Fault-Specific Adaptive Ensemble Framework with Multi-Stage Correction for Wireless Base Station Diagnosis
Jiachen Wang, University of Chinese Academy of Sciences

31454

7 Geometry Accelerated Distributionally Robust Training for Deep Modulation Classification
Shile Ni, southeast university; Xiang Zhang, Nanyang Technological University; Jiaqi Li, Yinfei Xu, Tao Guo, Xiaoyu Zhao, Southeast University

29180

8 Intelligent Robust Integrated Sensing and Communications Precoding in Cell-Free with Team Style
Ziyao Hong, Southeast University; Ting Li, Nanjing University of Posts and Telecommunications; Shu Xu, Southeast University; Chunguo Li, Southeast University, Nanjing, China; Dongming Wang, Southeast University

45541

9 One-shot Interference Classification in Communication Systems using a Relation Network
Andreas Andersson, Erik Axell, Tryggve Svensson, Magnus Malmström, Kia Wiklundh, Swedish Defence Research Agency

87159

10 Safe Reinforcement Learning for SD-WAN Traffic Engineering via Uncertainty-Aware Neural CBFs
Ghoshana Bista, Université Côte d'Azur; Kamal Singh, Laboratoire Hubert Curien, Universite de Saint-Etienne, Jean Monnet; Alain Pégatoquet, Université Côte d'Azur; Emmanuel Moulay, Université de Poitiers

28027

11 Self-supervised Blind Detection in LTV-MIMO Channels
Iresha Amarasekara, University at Albany (SUNY); Aveek Dutta, University at Albany SUNY

10279

12 Unsupervised Clustering of 5G Multi-User Resource Blocks via Hyperspherical Metric Learning
Wenjie Ma, Southeast University; Renjie Xie, Nanjing University of Posts and Telecommunications; Linning Peng, Aiqun Hu, Southeast University

74201

13 Boundary-aware Outlier Synthesis and Detection for Open-set Modulation Recognition
Wenyu Wang, Ouqiao Ma, Lei Zhu, Army Engineering University of PLA; Yuantao Gu, Tsinghua University

50177

14 MoE-DIR: A Dynamic SNR-Adaptive Framework for Drone Individual Recognition from RF Signals
Junzheng Wang, Harbin Institute of Technology, Shenzhen; Yao Shi, Harbin Institute of Technology?Shenzhen?; Emad Al-Susa, Manchester University; Yiping Duan, Tsinghua University

71600

15 A Dual-Branch Decoder Based Deep Learning Model for Cross Frequency Dynamic Channel Reconstruction in 6G
Ke Chen, Pan Tang, Peijie Liu, Gaofeng Nie, Beijing University of Posts and Telecommunications; Tian Lei, Beijing University of Posts and Telecommuniation; Zhang Jianhua, Beijing University of Posts and Telecommunications

77562

16 Attention-Guided Graph Neural Networks for RL based Resource Allocation in NR-V2X

Zidan Yang, Binjie Hu, South China University of Technology

72546

17 A Unified LLM-Based RIS Joint Precoding Framework with Practical Phase-Shift Models

Haochen Li, Linglong Dai, Tsinghua University

60653

18 Communication-Driven Exploration and Decentralized Coordination for UAV-Assisted 6G Networks

Han Zeng, Zongyuan Li, Luhao Fan, Haibo Wang, Zaichen Zhang, Southeast University

19259

19 Dual-Subcarrier Diversity and Sparsification for Stable Over-the-Air Federated Learning

Jiwon Choi, Joonhyuk Kang, Korea Advanced Institute of Science and Technology

24368

20 Graph Attention-Augmented Approximate Message Passing for OTFS Signal Detection

Qianyi Chen, Southeast University; Xingyu Zhou, National Mobile Communications Research Laboratory; Hengtao He, Jing Zhang, Southeast University; Chao-Kai Wen, National Sun Yat-Sen University, Taiwan; Xiao Li, Southeast University; Shi Jin, Southern University

37069

21 Lag-Aware Multi-Horizon PRB Load Forecasting for RAN Operations

Hamza Abbar, CentraleSupélec, Paris-Saclay University; Imed Hadj-Kacem, Orange; Maroua Drissi, Orange Labs; Salah Eddine Elayoubi, CentraleSupélec

93155

22 Learnable Pilot Design for OFDM-based Deep Joint source-channel Coding

Joohyun Shin, Korea Advanced Institute of Science and Technology (KAIST); Jiwan Seo, Korea Advanced Institute of Science and Technology; Joonhyuk Kang, Korean Advanced Institute of Science and Technology

91487

23 PINN Based Measurement Calibration for Underwater Acoustic Channel Knowledge Maps

Zhaoyang Lin, Tsinghua university; Jintao Wang, Zhi Sun, Tsinghua University

52229

24 Reduced-Complexity Multi-Tap Time-Domain Precoding via Deep Unfolding

Soma Kato, Yokohama National University; Hiroki Iimori, Yuto Hama, Dr. Chandan Pradhan, Dr. Szabolcs Malomsoky, Ericsson Research; Naoki Ishikawa, Yokohama National University

65367

25 RF Fingerprint Identification: Unveiling Device versus Manufacturer Signatures

Juhani Sankari, Roman Klus, Simona Lohan, Mikko Valkama, Tampere University

46242

26 Robust Hybrid Beamforming with Liquid Crystal Antennas and Liquid Neural Networks

Xinquan Wang, Mingjun Ying, New York University; Hongren Chen, Pennsylvania State University; Guanyue Qian, Xingchen Liu, Peijie Ma, Dipankar Shakya, New York University; Christos Argyropoulos, Pennsylvania State University; Theodore S. Rappaport, New York University

23702

27 SiameseNet-WSN: Deep Learning for Wireless Sensor Network Topology Inference

Jieyu Gao, Jie Li, Qihui Wu, Youbiao Wu, Haikuo Xu, Nanjing University of Aeronautics and Astronautics

92864

28 Transformer-Based Propagation Path Prediction for Wireless Channel Modeling Using 3D Point Clouds

Siqi Xu, Guogang Su, Junling Li, Cheng-Xiang Wang, Southeast University

95997

29 Byzantine-Robust Vehicular Federated Learning via Directional Dual-Consistency

Yilei Xue, Jianhua Li, Shanghai Jiao Tong University; Heyi Zhang, Shanghai JiaoTong University

85440

30 Federated Meta-Learning-Driven AI Transceivers: Rapid Adaptation and Multi-User Collaboration

Donghang Liu, Dou Li, Chunhang Zheng, Peking University

Open, Virtual, and Interoperable Networks and Services Papers

83587

1 Experimental Study of End-to-End (E2E) Performance for Multi-Vendor 5G Open RAN Systems in Indoor and Outdoor Urban Environments

Farhad Mehran, Charles Turyagyenda, Dritan Kaleshi, Digital Catapult

62077

2 Lightweight Security for Private Networks: Real-World Evaluation of WireGuard

Hubert Djuitcheu, Andrew Sergeev, Adtran Networks SE; Khurshid Alam, DFKI; Danny Santhosh, Achim Autenrieth, Adtran Networks SE; Jochen Seitz, Technische Universität Ilmenau

96170

3 Advancing Network Digital Twin Frameworks for Generating Realistic Datasets

Oscar Stenhammar, KTH Royal Institute of Technology; Sundeep Rangan, New York University; Gabor Fodor, Ericsson Research; Carlo Fischione, KTH

Protocol, Security and Services for Wireless Networks Papers

11463

1 Achieving Covertness in HARQ-Based URLLC via Optimized Power Allocation
Songhu Ge, Naval University of Engineering; Xiao Liang, naval university of engineering; Shengmin Dai, Zhongpu Cui, Yu Guo, Yedi Xin, Jinling Xing, Naval University of Engineering

92186

2 A Dirichlet-Based Zero Trust Model for Selective Authentication in 6G Networks
Ngoran Magnuss Dufe, University of Avignon(PhD Student); Abderrahim Benslimane, Universitè d?Avignon et des Pays du Vaucluse; Franklin Tchakounte, University of Ngaoundere; Charles Kamhoua, DEVCOM Army Research Laboratory; Dr. ?Adel Aldalbahi?, King Faisal University

15400

3 Evaluating Lightweight IDS Models for CAN Bus Security on Embedded Platforms
Naman Jain, Montclair State University; Inseo Hwang, University of Illinois Urbana-Champaign; Junggab Son, University of Nevada, Las Vegas; Daeyoung Kim, Montclair State University

65384

4 Joint Beamforming Design for Covert Transmission in NOMA-ISAC Network
Huaqing Yang, Dongdong Li, Hu Wang, Harbin Institute of Technology; Guan Gui, Nanjing University of Posts and Telecommunications; Zhutian Yang, Harbin Institute of Technology

29293

5 Resilience of Visible Light Communication: Manchester Encoding Effects Under Laser Jamming
Yorman Munoz, Lucresse Dongfack Tsakeng, Ihab Alzalam, Annika Tjabben, Deutsches Forschungszentrum für Künstliche Intelligenz GmbH; Christoph Lipps, German Research Center for Artificial Intelligence; Hans D. Schotten, Deutsches Forschungszentrum für Künstliche Intelligenz GmbH

67307

6 Angular-Domain Correlation Based One-Bit Jamming Detection in mmWave Cell-Free Massive MIMO
Pengguang Du, Cheng Zhang, Southeast University; Changwei Zhang, Purple Mountain Laboratories; Yongming Huang, Southeast University

67273

7 Blind Source Separation Driven Covariance Matrix Reconstruction for Main-lobe Jamming Suppression in Cell-free MIMO Communication Systems
Junsheng Luo, Cheng Zhang, Southeast University; Changwei Zhang, Purple Mountain Laboratories; Yongming Huang, Southeast University

69044

8 Effects of an unsynchronized RTS attack on a hardware 802.11ah test bed
Ignacio Dasso, Sebastien Maudet, Nantes Université; Renzo Navas, IMT Atlantique; Guillaume Andrieux, Nantes Université

44179

9 Group Authentication for Privacy-Preserving Federated Learning
Oylum Gerenli, Istanbul Technical University; Leyli Karacay, Ericsson Research; Enver Ozdemir, Istanbul Technical University

68333

10 Hierarchical and Communication-Efficient Federated Learning with Dynamic Client Selection and Unlearning for Connected Vehicles
Weiyu Wang, Hosei University; Xiuheng Liao, University of Aizu; Zhuotao Lian, Kyushu University; Franck Junior Aboya Messou, Hosei University; Buzhen He, Lanzhou University of Technology; Keping Yu, Hosei University; Shahid Mumtaz, Institute of Telecommunications

62528

11 Physical Layer Authentication With Channel Knowledge Maps in Indoor Environments
Luca Bonaventura, Francesco Ardizzon, Stefano Tomasin, University of Padova

59095

12 The Price of Transparency: Re-identification Risks in Publicly-Logged Vehicular Communications
Houssam DERFOUFI, ISAE-SUPAERO, Université de Toulouse; Victor CARPENTIER, ISAE-SUPAERO; Marina DEHEZ-CLEMENTI, ISAE-SUPAERO, Université de Toulouse

69323

13 Exploiting DMRS Constellation Rotation for Low-Power Signal Overlay Attacks
Shi Hu, Jian Wang, Shan Wang, PeiHao Song, Quan Peng, Junchao Feng, National University of Defense Technology

Radio Access Technology and Heterogeneous Networks Papers

97470

1 Coordinated Multi-Cell power control in Grant-Free NOMA for mMTC
Nasim Ravi, Nuno Lourenço, University of Coimbra (CISUC); Marilia Curado, University of Coimbra

72801

2 Multi-Reference and History-Enhanced Whale Optimization for Joint Delay-Aware Resource Allocation in Hierarchical Federated Edge Caching
Yu-Ting Li, Po-Chen Wu, Tsung-Yu Lin, Kai-Ten Feng, National Yang Ming Chiao Tung University; Prof. Lie-Liang Yang, University of Southampton; Jen-Ming Wu, Hon Hai Research Institute

78920

3 Priority-Based Uplink Resource Allocation for Private 5G Cybernetic Avatar Teleoperation
Arif Dataesatu, Takeshi Matsumura, National Institute of Information and Communications Technology

60361

4 QoS-Constrained Downlink Power Allocation in 6G Heterogeneous Networks: A Multi-Agent Reinforcement Learning Approach
Kexuan Wang, Zhejiang University; An Liu, College of ISEE, Zhejiang University

69834

5 SURA: Secure Unsourced Random Access
Mohammad Javad Ahmadi, Rafael F. Schaefer, Technische Universität Dresden; H. Vincent Poor, Princeton Universtiy

24672

6 Broad-Range Null-Steering for Dense mmWave NCR Multi-hop Mesh Networks
Yuta Tsunoda, Yuki Sasaki, Tokyo University of Science; Go Itami, Visban Corporation, Tokyo, Japan; Yuki Tanaka, None; Arokia Nathan, Cambridge University; Jin Nakazato, Kazuki Maruta, Tokyo University of Science

68783

7 Determinantal Point Process-Based User Selection for Uplink Multi-Cell NOMA Networks
Haruka Sakagawa, Tatsuaki Kimura, Doshisha University

85295

8 Graph Neural Networks for Vectors Optimization in Cell-Free Massive MIMO Systems With Mobility
Chen Xu, Jie Zeng, Yuanchi Yao, Yuting Zhang, Zhicong Ye, Beijing Institute of Technology

19507

9 Performance Analysis of Shared AP Selection in Multiple Multi-Access Point Coordinated Transmission Groups
Sota Kuwahara, Hiroaki Hashida, Yuichi Kawamoto, Nei Kato, Tohoku University; Yoshio Urabe, Panasonic Intellectual Property Management Co., Ltd.; Hiroyuki Motozuka, Panasonic Corporation

39974

10 Scalable Channel-Aware User Scheduling for Cell-Free MIMO Networks with User-Centric TRP Clustering
Hiroto Kikuchi, Tokyo University of Science; Yasuaki Yuda, Panasonic Corporation; Kenichi Higuchi, Tokyo University of Science

86865

11 Dynamic Handover via AI-assisted Signal Quality Prediction in 6G Multi-RAT Networks
Maria Lamprini Bartsioka, Anastasios Giannopoulos, Sotirios T. Spantideas, Panagiotis Trakadas, Four Dot Infinity

33466

12 Resource Allocation Based on Improved Sparrow Search for SWIPT-Assisted C-NOMA Systems
Yang Liu, Hanyu Yu, Yuming Wei, Enqi Wu, Jialong Zeng, Inner Mongolia University

Satellite Systems, Positioning Technologies, Localization and Navigation Papers

64215

1 Improving Radio SLAM via Information Sharing: Collaborative Performance Bounds
Radovan Juran, Ossi Kaltiokallio, Tampere University; Julia Equi, Ericsson Research; Jukka Talvitie, Simona Lohan, Mikko Valkama, Tampere University

26010

2 Low-Complexity Efficient Estimators for Multi-band 6G Carrier Phase Positioning
Ehsan Shourezari, Ossi Kaltiokallio, Jukka Talvitie, Mehmet C. Ilter, Tampere University; Gonzalo Seco-Granados, Universitat Autònoma de Barcelona (UAB); Henk Wymeersch, Chalmers University of Technology; Mikko Valkama, Tampere University

31543

3 Analysis of Out-of-Band Emissions in Sub-Band Full Duplex 5G-NTN operating at FR1
Taha Ahmed Khan, Eva Lagunas, SnT, University of Luxembourg

74737

4 Cooperative Localization, Velocity Estimation and Synchronization in DISAC Systems
Bingqing Li, Jie Yang, Southeast University; Hua Zhang, National Mobile Communications Research Lab., Southeast University; Le Liang, Haotian Wang, Southeast University; Shi Jin, Southern University

54932

5 From Ranging to Sensing: Toward Robust Human Detection with UWB Measurements
anthony bouery, Université de toulouse; François Aïssaoui, Orange Research; Réjane DALCE, Institut de Recherche en Informatique de Toulouse; Loig Le Meliner, Orange Innovation; Thierry Val, Université de Toulouse - IRIT; Adrien van den Bossche, University of Toulouse II - Jean Jaures

51383

6 Impact of Preprocessing on Neural Network?Based RSS/AoA Positioning
Omid Abbassi Aghda, NOVA University of Lisbon; Slavisa Tomic, Coplabs; Oussama Ben Haj Belkacem,)Instituto de Telecomunicacoes, Lisboa, Portugal.; João Guerreiro, FCT-Universidade Nova de Lisboa, Instituto de Telecomunicações; Nuno Souto, Instituto de Telecomunicações/ISCTE-IUL; Michal Szczachor, NOKIA; Rui Dinis, Universidade Nova de Lisboa

53165

7 Joint Pilot and Unknown Data-based Localization for OFDM Opportunistic Radar Systems
Mathieu Reniers, Martin Willame, UCLouvain; Jerome Louveaux, ICTEAM institute, Universite Catholique de Louvain; Luc Vandendorpe, Université cathoique de Louvain

95618

8 Large-Scale Indoor Positioning in Commercial 5G Networks: A Meta-Learning-Based cross-domain Generalization Approach
Jiyu Jiao, Rui Deng, southeast university; Jianping Zhu, Southeast University; Yuchen Ma, Xiaojun Wang, southeast university; Aimin Li, China Tower Co., Ltd; Peng Liu, Yuqing Li, Purple Mountain Laboratories

27275

9 Low-Complexity Beam Position Design for LEO Beam-Hopping Satellite Communications
Yilin Liang, Yuan Jiang, Lei Zhao, Sun Yat-sen University

20894

10 Multi-receiver Information Fusion For Improved Starlink and OneWeb LEO Satellites Tracking
Zak (Zaher) Kassas, Joe Saroufim, Samer Hayek, The Ohio State University

93856

11 MUSIC-Based AoD and Advanced Filtering for UAV Localization in GNSS-Denied Environments
Akash Rajasekaran, Mehari Meles, reino virrankoski, Aalto University; Riku Jäntti, Department of Communications and Networking, Aalto University

55207

12 Quality-Aware Denoising of Ultra-Short TDoA Measurements for 5G-NR UAV Localization
Zexin Fang, RPTU kaiserslautern-landau; Bin Han, Anjie Qiu, RPTU Kaiserslautern-Landau; Zhuojun Tian, KTH Royal Institute of Technology; Hans D. Schotten, RPTU kaiserslautern-landau

70021

13 Robust Channel Charting for Large-Scale Indoor Localization: A Weakly Supervised Framework with Sparse Anchors
Jianping Zhu, Southeast University; Jiyu Jiao, Yuchen Ma, Rui Deng, Xiaojun Wang, southeast university; Peng Liu, Yuqing Li, Purple Mountain Laboratories

64218

14 Target Sensing with mmWave 5G NR Signals Using a Deep Image Prior Neural Network

Yin Li, Xinyang Li, Ullrich J. Mönich, Technical University of Munich; Holger Boche, Technische Universität München

Signal Processing for Wireless Communications, Cooperative Communication Papers

15493

1 Duplex Mode Selection and Transceiver Design for URLLC in a Cell-Free RAN System with Network-Assisted Free-Duplex

Xinjiang Xia, Hao Guo, Aike Tao, Southeast University; chen huang, purple mountain labrotary; Zening Liu, Purple Mountain Laboratories; Dongming Wang, Southeast University; Junhui Zhao, Beijing Jiaotong University; Zhi Zhang, Beijing University of Posts and Telecommunications

67971

2 Enhancing Security for UAV Communications in LAWNs via Flexible-Duplex Cell-Free Design

Wei Shi, Purple Mountain Laboratories; Wei Xu, Yongming Huang, Jiacheng Yao, Wenhao Hu, Dongming Wang, Southeast University

95853

3 Geometry-Based Drift Compensation for Distributed Channel Sounding Measurements in Dynamic Drone Scenarios

Lorenz Mohr, Marc Miranda, Technische Universität Ilmenau; Sebastian Semper, TU Ilmenau; Julia Beuster, Technische Universität Ilmenau; Carsten Andrich, Institute for Information Technology, Technische Universität Ilmenau; Sebastian Giehl, Christian Schneider, Reiner Thomä, Technische Universität Ilmenau

79785

4 Relay Selection and Power Allocation in IBFD Relay under Residual Self-Interference for Industrial URLLC

Nann Win Moe Thet, National Institute Of Information And Communications Technology; Kenichi Takizawa, nict

61803

5 Repeater-Aided Over-the-Air Phase Synchronization in Distributed MIMO

Unnikrishnan Kunnath Ganesan, Ericsson AB; Sai Subramanyam Thoota, Nokia Standards; Erik G. Larsson, Linköping University

26775

6 RIS Control Framework for Coverage Enhancement in 5G/6G Networks

Sergio Zapata, J. Joaquin Escudero-Garzas, Gradiant

87891

7 Sensing-Aware Water-Filling: Optimal Power Allocation for Parkinsonian Tremor Monitoring in OFDM-ISAC

Yitong Zhang, Beijing Institute of Technology; Xiao Liu, Beijing University of Posts and Telecommunications; Chenxuan Wu, Hongzhen Pan, Zhaolan He, Hongfei Xu, Zhaorong Huang, Yongyi Dou, Beijing Institute of Technology; Xiqing Liu, Beijing University of Posts and Telecommunications

72172

8 Short girth-8 QC-LDPC codes constructed from highly structured exponent matrices defined by two integers

Guohua Zhang, Xuejiao Hao, Jiayu She, Xi'an university of posts and telecommunication; Yongzhi Zhai, Xi'an University of Posts and Telecommunications; YI FANG, Guangdong University of Technology

85153

9 Sparse Neural Network-Based Nonlinear Distortion Compensation with Bandwidth-Limited Training for Satellite Communication Receivers

Osamu Hasegawa, Masaaki Tanio, Masayuki Ariyoshi, NEC Corporation

16741

10 Tensorial Hankelization for 2-D DOA Estimation with Multiple Coherent Sources

Fei Cheng, Jintao Wang, Hang Liu, Professor Shaodan Ma, University of Macau

68453

11 Fundamental Energy Efficiency and Spectral Efficiency Limit for Machine-Type Communications

Jean-Marie Gorce, CITI Laboratory, INRIA; Shashwat Mishra, INSA Lyon; Chung Shue Chen, Bell Labs, Nokia; Lou Salaun, Nokia Bell Labs

38829

12 A Novel Time-Frequency Approach for Frequency-Hopping Signal Blind Estimation

Ali Khalaf, MC2 Technologies; Arthur Louchart, IMT Nord Europe; Sébastien Houcke, IMT Atlantique; Ray Abdo, MC2 Technologies; Laurent Clavier, Institut Mines-Telecom, IMT Nord Europe, France

69506

13 A Robust Parallel Subspace?Based Method for Delay?Doppler Estimation of OTFS Systems

Liangchen Sun, Department of Information Science and Technology, Kyushu University; Yutaka Jitsumatsu, Deptartment of Informatics, Kyushu University

81589

14 Beam Structured Turbo Channel Estimation for Massive MIMO-OFDM Systems

Siyuan Ni, Southeast University; Ding Shi, Purple Mountain Laboratories; Linfeng Song, Xiqi Gao, Southeast University

47123

15 Bussgang-based SIC decoder under non-linear power amplifier for two-user downlink NOMA

Gaston Philippe, Arthur Louchart, Anne Savard, IMT Nord Europe; Eduard Jorswieck, Technische Universität Braunschweig

40318

16 Cell-free MIMO-Assisted ISAC: Joint AP Switching and Power Allocation

Bin Yan, Zheng Wang, Southeast University; Amin Sakzad, Monash University; Yongming Huang, Southeast University; Michalis Matthaiou, Queen's University Belfast

42623

17 Cooperative Coded Matrix Multiplication in Secrecy-Constrained Vehicular Networks

Ahmad Tanha, Mohammad Reza Deylam Salehi, Monolina Dutta, Derya Malak, EURECOM

15637

18 Deep Learning-Enabled Direction Prior Acquisition for Near-Field EIT Channel Estimation

Chenhui Li, Beijing University of Posts and Telecommunications

50875

19 Delay Analysis of User-Centric Cell-Free Networks with Queuing Dynamics

Ke Yue, Junyuan Wang, Tongji University

34852

20 Design of an Iterative Detection and Decoding Receiver for LDPC-Coded Visible Light Communication

Yu-Hao Kuo, National Tsing Hua University; Shan Lu, Takaya Yamazato, Nagoya University; Yeong-Luh Ueng, National Tsing Hua University

64806

21 Doppler Compensation and Tracking Techniques for OTFS Systems in LEO Satellite Channels

Tzu-Yuan Liu, National Yang Ming Chiao Tung University; Shang-Ho Tsai, National Chiao Tung University; Jen-Ming Wu, Hon Hai Research Institute

11500

22 Double Linear Orthogonal AMP

Yufei Chen, Xidian University; Lei Liu, Zhejiang University; Yuhao Chi, Ying Li, Xidian University; Guan Yong Liang, Nanyang Technological University

71597

23 Frequency-Aware Tensor Learning for Statistical Channel Fingerprint Construction in Massive MIMO

Zhenzhou Jin, Li You, Southeast University; Xiang-Gen Xia, University of Delaware; Xiqi Gao, Southeast University

89611

24 Frequency-Domain Piecewise Mixture-of-Experts Approach for Digital Predistortion of RF Power Amplifiers

Nanxi Li, Yuan Jiang, Lei Zhao, Sun Yat-sen University; Jianming Lv, South China University of Technology

54839

25 Graph Attention Network-Based Detection Scheme for Asynchronous SCMA Systems

Keli Zhu, Liyan Li, Zhejiang University

57667

26 Horseshoe-based VBI-SBL for Channel Estimation in Windowed LEO Satellite OTFS Systems

Chaoqun Cao, Southeast University; Yuntao Hu, China Mobile (Hangzhou) Information Technology Co., Ltd.; Haifeng Wang, Shanghai Institute of Microsystem and Information Technology, CAS; Yihan Cang, The University of Hong Kong; Jingwen Xu, Nanjing Normal University; Chen Ming, Southeast University

63462

27 Joint Beamforming Design and ORIS Configuration for Optical RIS-based VLC Systems

Zhiyi Zhu, Jianfei Hu, Ruiding Hou, Chen Sun, Jiaheng Wang, Southeast University

35442

28 Joint Beamforming Design for Trade-Off Metric Maximization in MF-RIS-Aided ISAC System

Liyi Wang, Yuan Cao, WEI PENG, Huazhong University of Science and Technology

93306

29 Joint Channel Estimation and Signal Detection for OTFS Systems via U-Net-Assisted BiG-AMP

Jie Huang, Qiuyang Hu, Chongbin Xu, Fudan University

32906

30 Joint Data-Aided Sensing and Background Clutter Mitigation in Bistatic SIMO-OFDM ISAC Systems: a MAP Turbo Receiver

Zhen-Chang Chen, Jiun-Hung Yu, Ming-Chun Lee, National Yang Ming Chiao Tung University

16702

31 Joint Precoding and Folding-Angle Optimization for Foldable Antenna Arrays in Massive MIMO

Ziran Wang, Southeast University, China; Chen Sun, Southeast University; Xiqi Gao, Southeast University, China

74691

32 Joint Precoding and User Scheduling for Cell-Free Networks

Ruiding Hou, Jiaheng Wang, Southeast University; Sen Wang, China Mobile Research Institute; Yongming Huang, Southeast University; Liang Xia, Jing Jin, China Mobile Research Institute

83403

33 LO-Free Joint Communication and Sensing via Spatial Phase Manifold Communications

Hasan Atalay Gunel, TÜB?TAK B?LGEM; Mohaned Chraiti, Sabanci University; Ali Gorcin, Istanbul Technical University

39647

34 Low-Complexity Signal Scrambling Aided ODMA for Unsourced Multiple Access

Jianxiang Yan, Mengnan Hao, Ying Li, Guanghui Song, Xidian University

23061

35 Performance Analysis of Multi-IRS-Assisted Integrated Sensing, Communication, and Power Transfer Systems

Fei Xu, Xueyan Cao, Gerile Ge, Shuqi Li, Inner Mongolia University

37369

36 Performance Enhancement of Downlink UAV-Assisted FSO Communication Systems Using HARQ Protocols

Dushyant bhaskar, Indian Institute of Technology (IIT) Jodhpur, Rajasthan, India; Aashish Mathur, Indian Institute of Technology Jodhpur

56284

37 Physically constrained unfolded multi-dimensional OMP for large MIMO systems

Nay Klaimi, Luc Le Magoarou, Philippe Mary, INSA Rennes; Clément Elvira, Centrale Supelec

67300

38 Precoding for Uplink Multi-User MIMO-OFDM ISAC Systems with Multistatic Sensing

Chun-Yen Pan, Ming-Chun Lee, Ta-Sung Lee, National Yang Ming Chiao Tung University

74279

39 Radio Map-to-Beamforming Weight Mapping via Conditional Invertible Neural Networks

Shu Nozawa, Norisato Suga, Shibaura Institute of Technology

50616

40 Secrecy Analysis of Correlated FSO Systems: An FGM Copula Based Approach

Rina, Indian Institute of Technology Jodhpur; Dushyant bhaskar, Indian Institute of Technology (IIT) Jodhpur, Rajasthan, India; Aashish Mathur, Indian Institute of Technology Jodhpur

58007

41 Secure Dynamic Directional Modulation via Antenna Partitioning and Symbol-Level Precoding

Jules Burgat, Université Grenoble Alpes (CEA-LETI); Jean-Baptiste Doré, CEA-Leti; Joumana Farah, INSA Rennes; Matthieu Crussière, Institute of Electronics and Telecommunications of Rennes

71026

42 Smooth Penalty Detection Methods for Quantized and Distributed Massive MIMO Systems

Qiqiang Chen, Zheng Wang, Yongming Huang, Southeast University; Tony Q.S. Quek, Singapore University of Technology and Design

96308

43 Sparse Nonlinear Digital Self-Interference Cancellation for Full-Duplex Radios

M. Hossein Attar, Technische Universität Berlin; Ramez Askar, Fraunhofer Institute for Telecommunications, Heinrich Hertz Institute; Jochen Fink, Fraunhofer institute hhi; Slawomir Stanczak, Fraunhofer Heinrich Hertz Institute

38318

44 Sparse Precoding Codebook Design for Limited Feedback Uplink Scenarios
Joe Asano, Yokohama National University; Yuto Hama, Hiroki Iimori, Dr. Chandan Pradhan, Dr. Szabolcs Malomsoky, Ericsson Research; Naoki Ishikawa, Yokohama National University

75026

45 Synchronized SS-CDMA on USRP Using Wi-Wi: Performance Evaluation Under Multiple Timing Offsets
Toshiki Ouchi, Serena Akasaka, Masataka Miyake, Suguru Kameda, Hiroshima University

91338

46 Three-Dimensional Azimuth Estimation Method Based on Cylindrical Uniform Circular Array
Yuan Ning, Jingran Huang, Xiang Ji, Wanming Hao, Zhengzhou University

99844

47 Unified Cramér?Rao Bound for Near?Field Localization in Modular XL?MIMO Systems
Xiufeng Qian, Yijin Pan, Southeast University; Anzheng Tang, The Hong Kong University of Science and Technology; Junbo Wang, Southeast University; Yijian Chen, ZTE Corporation, Shenzhen, China; Yu Hongkang, ZTE Corporation; Jiangzhou Wang, Southeast University

89778

48 Movable Antenna Array-Enabled Anti-Jamming Secure Wireless Communication
Zhihui Shang, Xiangjun Yan, Zhiqiang Xiao, Xiaoqiang Qiao, Hao Wu, Tao Zhang, National University of Defense Technology

Space, Non-terrestrial, Airborne, and Maritime Mobile Systems and Services Papers

31766

1 Adaptive ISAC-Based Predictive Beamforming for High-Speed UAVs with Jittering Effects
Xi Tao, Lin Ma, Liang Ye, Harbin Institute of Technology; Danyang Qin, Heilongjiang University

48951

2 An Internet of Flying Things Prototype for the Localization of Gas Emission Sources
Davide Scazzoli, Alessandro Andrea Vogrig, Federico Nigro, Vineeth Teeda, Politecnico di Milano

82446

3 Enhancing Single-Carrier DFE Performance in Underwater Acoustic Communications under Non-Gaussian Impulsive Noise
Hiroyuki Fukumoto, Takumi Ishihara, Yosuke Fujino, NTT Inc.

21098

4 Field Trials of Beamforming-Based Coverage Fixation Scheme for Multi-Cell Aerial Platforms
Koji Tashiro, Koichi Maki, Wataru Takabatake, Tsutomu Ishikawa, Kenji Hoshino, SoftBank Corp.

13745

5 Impact of Terrestrial Blockage on the Coverage of Integrated Satellite-Terrestrial Networks
Joon-Young Park, Korea University; Byungju Lim, Pukyong National University, Busan, South Korea; Young-Chai Ko, Korea University

27195

6 Inverse Synchronization Scheme for Mitigating Beam Interference between Adjacent HAPS Systems in TDD Service Links
Yuki HOKAZONO, Hirofumi Nakajo, Kenji Fukasawa, Hisayoshi Kano, NTT DOCOMO INC.; Yuto Muroki, Yoshihisa Kishiyama, Space Compass Corporation; Munehiro Matsui, NTT Corporation

33554

7 ISL-Assisted Handover Design for LEO Non-Terrestrial Networks
Kuang-Hsun Lin, National Yang Ming Chiao Tung University; Hsin-Wei Chen, Hung-Yu Wei, National Taiwan University

99088

8 Joint Optimization of Resource Allocation, Task Offloading and AAV Trajectory Planning in Hierarchical Aerial Computing Networks
Qian Liu, Guangyu Yang, Wenhan Jie, Qilie Liu, Chongqing University of Posts and Telecommunications

67164

9 Optical Inter-Satellite Link-Assisted LEO Satellite Communication Networks: Outage Analysis
Vinay Mohan, Wonjae Shin, Korea University; Aashish Mathur, Indian Institute of Technology Jodhpur; Dushyant bhaskar, Indian Institute of Technology (IIT) Jodhpur, Rajasthan, India

21943

10 Dual-Connectivity-Assisted Task Offloading and Resource Allocation in SAGIN
Maoyang Qiu, Harbin Institute of Technology (shenzhen); Yao Shi, Harbin Institute of Technology?Shenzhen?; Yiping Duan, Tsinghua University; Zhang Qinyu, Harbin Institute of Tech.

62774

11 GAT-Enhanced Hybrid DRL for Resource Allocation in RSMA-Based Satellite Networks
Lingyun Wang, Harbin Institute of Technology, Shenzhen; Yao Shi, Harbin Institute of Technology?Shenzhen?; Yiping Duan, Tsinghua University

84783

12 Adaptive Control of Reverse Use of TDD Frame Structure to Maximize System Throughput in Co-existing Networks with HAPS and Terrestrial BSs
Takane Nakazawa, Kenichi Higuchi, Tokyo University of Science

29697

13 AGAT-SC: Adaptive Graph Attention Network-based Spectral Clustering Algorithm for LEO Satellite Networks
Jiahui Wang, Yaqiong Liu, Shijie Zhang, Beijing University of Posts and Telecommunications

87695

14 A Massive MIMO OFDM Transmission Scheme Robust to Doubly Selective Channels in Underwater Acoustic Communications
Shuji Nonaka, Kota Koyano, Ayaka Saeki, Tokyo University of Science; Daisuke Hisano, The University of Osaka; Mitsuyasu Deguchi, Yukihiro Kida, Takuya Shimura, Japan Agency for Marine-Earth Science and Technology; Kazuki Maruta, Tokyo University of Science

40794

15 Blind Parameter Estimation of Underwater Acoustic S2C Signals in Impulsive Noise
Thomas Bureau, Francois-Xavier Socheleau, Sébastien Houcke, IMT Atlantique

99330

16 Cost-Efficient GBS Sector Selection for Low-Altitude Communication Network

Pengcheng Sun, Southeast University; Qin si, China Mobile Group Design Institute Co., Ltd.; Hong Shen, Southeast University; Siqi Tang, Beijing University Of Technology; Sirui Wu, Southeast University; Bo Peng, China Mobile Group Design Institute Co., Ltd.; Hailiang Lu, Southeast University; Songtao Gao, China Mobile Group Design Institute Co., Ltd.; Wei Xu, Southeast University; Qixuan Zhang, China Mobile Group Design Institute Co., Ltd.

75918

17 DQN?Based Joint UAV Trajectory and Association Planning in NTN-Assisted Networks

Afsoon Alidadi Shamsabadi, Cosmas Mwaba, Carleton University; Thomas Nugent, Honeywell; Jie Gao, Pablo Madoery, Halim Yanikomeroglu, Carleton University; Subhadeep Pal, Honeywell

60378

18 Escaping from the Shadow: Bottleneck-Aware UAV Placement for High-Throughput Relaying

Dongrak Choi, Seoul National University; Yongjae Yoo, Samsung Electronics; Yubin Choi, Seoul National University; Jeongyeup Paek, Chung-Ang University, South Korea; Saewoong Bahk, Seoul National University

97539

19 Hierarchical Edge-Cloud Task Offloading in NTN for Remote Healthcare

Alejandro Flores, SnT, University of Luxembourg; Danial Shafaie, Barcelona Supercomputing Center; Konstantinos Ntontin, University of Luxembourg; Elli Kartsakli, Barcelona Supercomputing Center; Symeon Chatzinotas, SnT, University of Luxembourg

71958

20 Joint Beamforming and Illumination Pattern Design for Beam-Hopping LEO Satellite Communications with Per-Antenna Power Constraints

Tingting XIAO, Yuhao Zhang, Lianming Li, Southeast University; Fu-Chun Zheng, Harbin Institute of Technology (Shengzhen) & The University of York; Mingli Dong, State Key Laboratory of Satellite Network, Shanghai, China; Yu Liang, Qi Hao, Shanghai Satellite Network Research Institute Co., Ltd.

62310

21 Joint Line-of-Sight Probability Analysis for Air-to-Ground Communication in Grid-Based Urban Environments

Arisa Iwamoto, Tatsuaki Kimura, Doshisha University

52080

22 Joint Statistics and Outage Analysis of Time-Correlated Shadowed Rician Channels in LEO Satellite Downlinks

JUNG MIN SUH, Young-Chai Ko, Korea University

78223

23 Load-Balanced Offloading in SAGIN with Civil Aircraft Edge Nodes: A Lyapunov?Primal?Dual Potential-Game Framework

liu feng, University of Science and Technology Beijing; du bing, university of science and technology beijing; Guo Ziyang, University of Science and Technology Beijing

99551

24 Mobility-Aware Feeder Link Management: A Signal-Quality and Direction-Weighted Approach

CHEN-CHING NIEH, National Taiwan University; Kuang-Hsun Lin, National Yang Ming Chiao Tung University; Hung-Yu Wei, National Taiwan University

55049

25 Multi-Domain Resource Awareness Based on FTAoI for Heterogeneous Satellite Networks

Jin Zhang, Xuxin Zhang, Jiachen Sun, Kai Liu, Tsinghua University; Linling Kuang, Tsinghua University, China; Jianhua Lu, Tsinghua University

21779

26 Resilience Through Escalation: A Graph-Based PACE Architecture for Satellite Threat Response

Anouar Boumeftah, Polytechnique Montréal; Sarah McKenzie-Picot, Peter Klimas, Northstar Earth & Space; Gunes Karabulut Kurt, Polytechnique de Montreal, Canada

46454

27 Robust Precoding With UAV Motion Uncertainty for HF Skywave Massive MIMO

Hengzhi Bai, Chen Sun, Southeast University; Haichao Wang, Army Engineering University of PLA; Xiqi Gao, Southeast University

55150

28 Robust Sensor-less Beam Tracking for UAV mmWave Communications :An Innovation-Based Adaptive EKF Approach

Yuandi Sun, Southeast University

17610

29 Satellite Deployment Strategies to Prevent Temporary Capacity Degradation in MIMO Feeder-Link Constellations

Masaru Sakai, Takaaki Owaki, Hiraku Okada, Nagoya University; Takaya Yamazato, Nagoya University, JAPAN; Koyo Tategami, NTT; Daisuke Goto, Kiyohiko Itokawa, Tomohiro Tokuyasu, Fumihiro Yamashita, NTT Corporation

92749

30 Scalable Multi-UAV Computation Offloading and Resource Scheduling via Transformer-Based Multi-Agent Reinforcement

Tianhao Ma, Yulu Yang, Tiecheng Song, Southeast University; Xiaoqin Song, Nanjing University of Aeronautics and Astronautics

15966

31 Secret Key Distillation in Fractional-Doppler LEO Satellite Channels using OTFS

Johannes Voichtleitner, Luis Torres Figueroa, Swadeesh Srivatsa Mysore Ramesha, Ullrich J. Mönich, Moritz Wiese, Technical University of Munich; Marc Geitz, Deutsche Telekom AG; Holger Boche, Technische Universität München

52982

32 Spectrum Sharing in ISTNs: A Branching Deep Q-Network and Stackelberg Game Approach

Zhu Jincheng, Southeast University, Purple Mountain Laboratories; Li Fanzhe, Pan Zhiwen, Southeast University

65967

33 Transformer-Enhanced SAC for Joint Power?Frequency Allocation in HTS Systems

Yuwei Min, Gaofeng Nie, Tian Hui, Beijing University of Posts and Telecommunications

72996

34 User-Driven Scheduling Strategy for LEO Satellite Communication Systems

Yunseo Lee, Hyunwoo Lee, Daesik Hong, Yonsei University

38003

35 A Communication-Based MARL Approach with Adaptive Variable-Length Messages for AoI-Optimal Multi-UAV Data Collection

Yifei Cao, Yifei Zhang, Fan Zhang, Chao Xu, Northwest A&F University; Tony Q.S. Quek, Singapore University of Technology and Design

54881

36 Beam Scheduling for Multi-Connectivity NTN LEO D2C Satellite Networks

Junru Wang, Deyu Kong, Qing Guo, Harbin Institute of Technology; Giorgio Taricco, Politecnico di Torino

69626

37 Joint Beam Hopping Pattern and Bandwidth Allocation for LEO : A Communication-Radio Map Sampling Trade-off
songming han, xidian university; Zhaowei Wang, Nan Cheng, Ruijin Sun, Zhisheng Yin, Xidian University

29321

38 Tracking-Free RAKE Receiver Based on Neural Networks for DSSS Signals over Shallow Water Acoustic Channels
Chenyu Zhang, Institute of Science Tokyo; Kazuhiko Fukawa, Tokyo Institute of Technology

Spectrum Management, Spectrum Sharing and Green Communication Papers

36079

1 Graph-Based Search for Energy-Efficient Clustering in User-Centric Cell-Free Massive MIMO
Julio Tesolin, PUC-Rio; Rodrigo C. de Lamare, Pontifical Catholic University of Rio de Janeiro, Brazil

30979

2 LarS-Net: A Large-Scale Framework for Network-Level Spectrum Sensing
Hao Guo, Ruoyu Sun, CableLabs; Amir Hossein Fahim Raouf, North Carolina State University; Rahil Gandotra, CableLabs; Jiayu Mao, Ohio State University; Mark J. Poletti, CableLabs

66258

3 Distributed DQN-Based Frequency Block-Dependent Sleep Control of Base Stations for Improving Energy Efficiency under FTP Traffic Model
Ryo Tanaka, Takanori Hara, Tokyo University of Science; Satoshi Suyama, NTT DOCOMO, INC.; Satoshi Nagata, NTT DOCOMO INC.; Kenichi Higuchi, Tokyo University of Science

86347

4 Distributed Spectrum Resource Allocation for Cell-Free Radio Access Network
Xiaopeng Guo, Southeast University; Yue Wu, Purple Mountain Laboratories; Pengzhe Xin, Jiamin Li, Pengcheng Zhu, Xiangyang Wang, Dongming Wang, Southeast University

46251

5 GNN-Based Base Station Energy Saving for 5G Networks
Chia-Chi Yu, National Central University; Sheng-Shih Wang, Lunghwa University of Science and Technology; Shiann-Tsong Sheu, National Central University

72573

6 Link-Specific AP Selection for Multi-Link Operation in Multi-AP Coordination Systems
Ryu Shoji, Hiroaki Hashida, Yuichi Kawamoto, Nei Kato, Tohoku University; Yoshio Urabe, Panasonic Intellectual Property Management Co., Ltd.; Hiroyuki Motozuka, Panasonic Corporation

40539

7 WideBand Spectrum Compressed Sensing via a BERT-Inspired Transformer Encoder
haipeng ji, Tao Zhang, Zhiqiang Xiao, Hao Wu, Xiaoqiang Qiao, National University of Defense Technology

Transport Electrification, Vehicular Electronics, Intelligent Transport Systems Papers

54485

1 A Kaya-like identity for decomposing and assessing business models for workplace and public electric vehicle charging
Param Somane, Ryan Hanna, University of California San Diego

54781

2 A Semi-supervised Approach for Car-following Driver Behavior Recognition
Nastaran Khoshnood Sarabi, Graz University of Technology; Cornelia Lex, University of Graz

25716

3 CARLA-Round: A Multi-Factor Simulation Dataset for Roundabout Trajectory Prediction
Xiaotong Zhou, Zhenghui Yuan, University of Warwick; Yi Han, Wuhan University of Technology; Tianhua Xu, University of Warwick; Laurence. T. Yang, Zhengzhou University

10260

4 Efficient Time Series Transformer Architecture for Generalised Two-Wheeler Driving Event Recognition
Arihant Jain, International Institute of Information Technology Hyderabad; Geethika Palla, Deepak Gangadharan, International Institute of Information Technology, Hyderabad

37645

5 Fail-Operational Safety Trajectory Generation for Autonomous Vehicles in Public Environments
Mehmet KAYA, Elif Toy Aziziaghdam, Otokar Automotive and Defense Ind.

91100

6 Joint Characterization of PWM Headlight and Event Camera Bias Parameters for Nighttime Object Detection
Leonard Haensel, HELLA GmbH & Co. KGaA; Torsten Bertram, TU Dortmund University

68731

7 Lorentz Force Induced Mechanical Deformation in High Current Automotive Electronics
Rao Morusupalli, Yuvam Kulkarni, Tuhin Sinha, Rivian and Volkswagen Group Technologies

92223

8 OtonoMonitor: A Heterogeneous FuSa-Aware Safety Monitoring System for Autonomous Vehicles
Batuhan Y?lmaz, Otokar Automotive and Defense Ind.; Berke Miraç, Burak Baht?n Salt?k, OTOKAR; Elif Toy Aziziaghdam, Otokar Automotive and Defense Ind.

54744

9 Voxel-Based Online Extrinsic Calibration Monitoring for Multi-LiDAR Systems using PCA
Sanem Uytan, Onur Acun, Elif Toy Aziziaghdam, Otokar Automotive and Defense Ind.

49500

10 AFER: A Multi-View Radar Fusion Framework via Axial Feature Extraction and Reconstruction
Zongyuan Zhang, Harbin Institute of Technology(Shenzhen); Yao Shi, Harbin Institute of Technology?Shenzhen?; Yunxu Sun, Harbin Institute of Technology (Shenzhen); Jie Deng, PengCheng Laboratory; Nanchi Su, Harbin Institute of Technology(Shenzhen)

84381

11 Leveraging Real Perception Data in V2X Simulation for Misbehavior Detection Assessment
Jiahao ZHANG, IRT Systemx; Ines BEN JEMAA, IRT SystemX; zakaria hebbal, IRT-SystemX

18865

12 A Multi-Modal Fusion Framework for Vehicle-Infrastructure Cooperative 3D Object Detection
Cai Yang, Xin Huang, Yuanhang Zheng, Tongji University; Xuming Tian, College of Electronic and Information Engineering, Tongji University; Xinhong Wang, Chao Wang, Tongji University

98580

13 Automotive SAR Image Enhancement via Joint Autofocus and Sparse Optimization
Kun Deng, Chenxiao Yin, Zhanye Chen, Southeast University; Jie Li, Nanjing University of Aeronautics and Astronautics; Yan Huang, Southeast University

10874

14 CEEMDAN-Driven Deep Learning for High Temporal Resolution EV Charging Load Forecasting: A Comprehensive Benchmark Study
mamunur Rashid, Tennessee Tech university; Nan Chen, University of Ottawa; Syed Ali Asad Rizvi, Tennessee Technological University

50294

15 Energy-Aware Deep Reinforcement Learning for Adaptive Cruise Control under Communication Packet Loss
Shahriar Shahram, Yaser P. Fallah, University of Central Florida

12284

16 Enhancing Privacy-Preserving Capability of In-Vehicle LLM-Empowered Agents on Contrastive Instruction-Tuning
Yihang Wu, Junxiang Chang, Fudan University; Zhijun Yuan, Seres Automotive Co., Ltd.; Qin Su, Seres Automotive Co., Ltd; Yang Zhang, Seres Automotive Co., Ltd.; Qiang Duan, The Pennsylvania State University; Xin Wang, Yang Chen, Fudan University

63399

17 Improving Deep Reinforcement Learning-Based Autonomous Driving in Narrow Residential Lanes with Curriculum Learning
Sarah Puspa Dewi, Universitas Gadjah Mada; Kadek Gemilang Santiyuda, Institut Bisnis dan Teknologi Indonesia; Kabul Kurniawan, Muhammad Alfian Amrizal, Moh Edi Wibowo, Nur Rokhman, Reza Pulungan, Universitas Gadjah Mada; Vincent F. Yu, National Taiwan University of Science and Technology

47987

18 Physics-Informed Stochastic Receding Horizon Control for Autonomous Energy Management in Solar Racing
Pulkit Kumar, Vijay Babu Koreboina, Manipal Institute of Technology

65853

19 Real-World Joint State Estimation of LiFePO4 Traction Batteries Using a Voltage-Clustered ECM and an Unscented Kalman-Bucy Filter
Johanna Orellana Iñiguez, Madson Cortes de Almeida, University of Campinas

36409

20 Reliable Identification of Visual Obstructions in Automotive Cameras
Tim Dieter Eberhardt, Karlsruhe Institute of Technology; Matthias Klingler, HS Kempten; Tim Brühl, Tin Stribor Sohn, Tim Alexander Bader, Maximilian Dillitzer, Porsche AG; Stefan-Alexander Schneider, HS Kempten; Wilhelm Stork, Karlsruhe Institute of Technology (KIT), Germany

65730

21 SERA: A Scenario-Enhanced RAG Framework for In-Vehicle Intelligent Systems
Ye Cao, Ao Jiao, Fudan University; Zhijun Yuan, Erkang Xie, Yang Zhang, Seres Automotive Co., Ltd.; Qiang Duan, The Pennsylvania State University; Yang Chen, Fudan University

58606

22 Simulating the Invisible: Learning Realistic Opaque Soiling for Automotive Cameras
Tim Dieter Eberhardt, Karlsruhe Institute of Technology; Tim Brühl, Tin Stribor Sohn, Tim Alexander Bader, Maximilian Dillitzer, Porsche AG; Wilhelm Stork, Karlsruhe Institute of Technology (KIT), Germany

48726

23 Synthesizing Continuous-Curvature Road Geometry from Lane Markings and Navigation Maps
Yuheng Wang, Michael Rehme, Marc Necker, Mercedes-Benz AG; Volker Schwieger, University of Stuttgart

66027

24 BiMamba-GD: Integrating Graph Diffusion Convolution and Bidirectional Selective State Space Model for Vessel Traffic Flow Forecasting
Songming Liu, Tong Wang, Guangxin Yang, Min Ouyang, Tianfang Lv, Jiale Li, Shan Gao, Liwei Chen, Harbin Engineering University

62999

25 Reinforcement Learning for Dynamic Clustering and Routing in Customized Transportation Systems
Weisheng Zhang, Peng Sun, Duke Kunshan University

58408

26 Sample-Efficient Multi-Agent Traffic Signal Control with Federated Global Consensus Prediction
Xiaoyang Zhang, Chen-Khong Tham, National University of Singapore

Vehicular and Wireless Testbeds and Proof-of-Concepts Papers

27560

1 A Multi-Modal UWB-Radar-Camera Dataset for Vulnerable-Road-User Sensing at Urban Intersections
Fabian de Ponte Müller, German Aerospace Center (DLR); Mouhamed Aghiad Raslan, Dortmund University of Applied Sciences and Arts (; Mingyu Liu, Technical University of Munich; Christos Oikonomopoulos, IMST GmbH; Martin Schmidhammer, German Aerospace Center (DLR); Ibrahim Rashdan, German Aerospace Center; Benedikt Merk, German Aerospace Center (DLR); Reinhard Kulke, IMST GmbH; Leah Strand, Venkatnarayanan Lakshminarasimhan, Technical University of Munich; Tobias Ulrich, Andreas Becker, Dortmund University of Applied Sciences and Arts; Stephan Sand, German Aerospace Center (DLR); Alois Knoll, Technische Universität München

58286

2 Enhancing Container Port Operations: Performance Evaluation of Private 5G Standalone Network
Miguel Villanueva Fernandez, Aalborg University; O. S. Peñaherrera-Pulla, University of Malaga; Alejandro Ramírez-Arroyo, Aalborg University; Karsten H. Soerensen, APM Terminals Aarhus; Preben Mogensen, Aalborg University

74794

3 Experimental Demonstration of an OFDM Physical Layer Secured by M-IDP and Assisted by a T-RIS
Khaled Tahkoubit, Jean-Baptiste Doré, Nicolas CASSIAU, CEA-Leti

12640

4 RFNoC-Based FPGA Offloading for Fully Programmable PHY Acceleration

Ahmet Oguz K?slal, Osman Mert Yilmaz, Bengü Bilgiç Keskin, TÜB?TAK B?LGEM; ?brahim Hökelek, TÜB?TAK; Ali Gorcin, Istanbul Technical University

16909

5 RF testbed based on channel emulation for evaluation of 5G Non-Public Networks in railways

Fátima Fernández, IKERLAN S. COOP.; Aitor Arriola, Ikerlan; Aitor Sanchoyerto, IKERLAN S. COOP.; Vanesa Serrano, CAF Signalling

39402

6 Scenario-Driven Evaluation of In-Vehicle Connectivity Using a Programmable Connectivity Controller

Victor Jarlow, AstaZero; Robert Brenick, AstaZero AB; Samuel Bach, Magnus Westling, AstaZero

94410

7 AutoMute: A Friendly Jammer Solution for Vehicle Data Privacy

Matteo Varotto, University of Padova; Hannah Noettgen, Darmstadt University of Applied Sciences; Stefano Tomasin, University of Padua; Cristoph Krauss, Stefan Valentin, Darmstadt University of Applied Sciences

57919

8 Cooperative Robotics Reinforced by Collective Perception for Traffic Moderation

Mohammad Khoshkdahan, John Pravin Arockiasamy, Andy Flores Comeca, Karlsruhe Institute of Technology; Alexey Vinel, Karlsruhe Intitute of Techology

43396

9 Open-Source Based and ETSI Compliant Cooperative, Connected, and Automated Mini-Cars

Lorenzo Farina, University of Bologna; Federico Gavioli, Salvatore Iandolo, Francesco Moretti, University of Modena and Reggio Emilia; Giuseppe Perrone, Politecnico di Torino; Matteo Piccoli, University of Bologna; Francesco Raviglione, Marco Rapelli, Politecnico di Torino; Antonio Solida, University of Modena and Reggio Emilia; Paolo Burgio, Università degli studi di Modena e Reggio Emilia; Carlo Augusto Grazia, University of Modena and Reggio Emilia; Alessandro Bazzi, University of Bologna

37651

10 Predicting Networks Before They Happen: Experimentation on a Real-Time V2X Digital Twin

Roberto Pegurri, Politecnico di Milano; Habu Shintaro, Institute of Science Tokyo; Francesco Linsalata, Politecnico di Milano; Kui Wang, Tokyo Institute of Technology; Tao Yu, Institute of Science Tokyo; Eugenio Moro, Politecnico di Milano; Maiya Igarashi, Institute of Science Tokyo; Antonio Capone, Politecnico di Milano; Kei Sakaguchi, Tokyo Institute of Technology

43622

11 Wi-Fi Sensing for Occupancy Detection in Aircraft Cabins

Muhammad Nasar Jamal, University of Klagenfurt; Enrique Caballero, Klagenfurt University; Dominic Schupke, Airbus; Christian Bettstetter, University of Klagenfurt

Vehicular Communication, VehicularTelematics, Vehicular Cooperation, Autonomous Driving Papers

65985

1 AI-Assisted Maneuver Coordination for Connected and Automated Vehicles

Diego Gasco, Politecnico di Torino; Rafael Molina-Masegosa, Miguel Sepulcre, Universidad Miguel Hernandez de Elche (UMH); Claudio Casetti, Politecnico di Torino; Javier Gozálvez, Universidad Miguel Hernandez de Elche (UMH)

13250

2 Aligning What Matters: Object-Centric and Structure-Aware Feature Alignment for Heterogeneous Collaborative Perception

Donghui Li, Ehsan Javanmardi, The University of Tokyo; Manabu Tsukada, the University of Tokyo

35921

3 Consistently Low-Latency V2N2V Communications Using Multi-Band Redundant Radio Access and SRv6 MUP

Manabu Mikami, SoftBank Corp.; Jin Nakazato, Tokyo University of Science; Satoru Matsushima, SoftBank Corp.

61701

4 Demystifying VEINS: A Reality Check Against Living Lab Experiments

Antonio Solida, University of Modena and Reggio Emilia; Giovanni Gambigliani Zoccoli, Università di Modena e Reggio Emilia; Gaetano Orazio Cauchi, University of Modena and Reggio Emilia; Filip Valgimigli, Università di Modena e Reggio Emilia; Salvatore Iandolo, Martin Klapez, Maurizio Casoni, University of Modena and Reggio Emilia; Mirco Marchetti, Università di Modena e Reggio Emilia; Carlo Augusto Grazia, University of Modena and Reggio Emilia

35428

5 Distributed Digital Twin-Driven Deep Reinforcement Learning for Energy-Efficient Task Offloading in Vehicular Edge Networks

Takhona Mbingo, Shruti Lall, Sunil Maharaj, University of Pretoria

91673

6 Improving Misbehaviour Detection Through Infrastructure Support Without Raising Complexity

Francesca BASSI, Jiahao ZHANG, IRT Systemx; Ines BEN JEMAA, IRT SystemX; Frank Kargl, Benjamin Erb, Ulm University

77293

7 Mobility-Aware Offline Reinforcement Learning for Optimizing ABR in Teleoperated Driving

Soto Anno, Takuma Tsubaki, Takashi Torii, Akito Suzuki, NTT, Inc.; Takuya Tojo, NTT Network Service Systems Laboratories

17579

8 Multi-Modal Sensor Fusion for Beam Prediction in RIS-Assisted Vehicular mmWave Systems

Ahmad Nazar, Iowa State University; Khalid Kanaan, King Abdullah University of Science and Technology; Ahmed Nasser, King Abdullah University for Science and Technology; Mohamed Y. Selim, Iowa State University; Ahmed M. Eltawil, King Abdullah University of Science and Technology (KAUST)

14997

9 Network-Level Bit-Flipping Attacks on Cooperative Adaptive Cruise Control in 5G Environment

Chengwei Duan, University of Florida; Joon Kim, University of California, Berkeley; Sandip Ray, University of Florida

82206

10 Reliability Analysis of 5G Communications for Automated Urban Transportation Systems

Santiago Rios-Guiral, Université de Lorraine, CNRS, Inria, LORIA; Abdelhak Hidouri, CEDRIC Laboratory, Conservatoire National des Arts et Métiers (CNAM); Abdelkader Lahmadi, LORIA - CNRS, Inria, Université de Lorraine, France; Ye-Qiong Song, University of Lorraine; Pedro B. Velloso, Samia Bouzefrane, CEDRIC Laboratory, Conservatoire National des Arts et Métiers (CNAM)

65017

11 Robust Fusion of Object-Level V2X for Learned 3D Object Detection

Lukas Ostendorf, Lennart Reiher, RWTH Aachen University; Onn Haran, Qualcomm Technologies, Inc.; Lutz Eckstein, Institut für Kraftfahrzeuge RWTH Aachen University

48851

12 SDVDiag: Using Context-Aware Causality Mining for the Diagnosis of Connected Vehicle Functions

Matthias Weiß, Falk Dettinger, Elias Detrois, Nasser Jazdi, Michael Weyrich, University of Stuttgart

79571

13 TacitCollab: A Plug-and-Play V2X Safety Filter via Free-Form LLM Dialogue

Ye Tao, Manabu Tsukada, the University of Tokyo; Hiroshi Esaki, The University of Tokyo

20850

14 Tele-operability-estimation model for construction machinery

Nozomi Endo, NTT, Inc.; Masanori Koike, NTT Inc.; Noritsugu Egi, Akihiro Shiozu, NTT, Inc.

61143

15 Towards Formalizing Safety Monitoring in Vehicular Lane Changes using Temporal Logic

Mariam Nour, Toyota InfoTech Labs; mohamed zaki, Western University

90601

16 When Cooperation Should End: Maneuver Coordination Cancellation for Connected Automated Driving

Rafael Molina-Masegosa, Universidad Miguel Hernandez de Elche (UMH); Sergei S. Avedisov, Toyota North America R&D - InfoTech Labs; Miguel Sepulcre, Universidad Miguel Hernandez de Elche (UMH); Onur Altintas, Toyota Motor North America R&D; Javier Gozálvez, Universidad Miguel Hernandez de Elche (UMH)

88073

17 A Semantic-Communication-Aided Pillar-Voxel Feature Fusion Network for Vehicle-Infrastructure Cooperative 3D Object Detection

Xuming Tian, Yuanhang Zheng, Xin Huang, Cai Yang, Chao Wang, Tongji University

42558

18 Context-aware Bandwidth Adaptation for Video Stream of Teleoperated Fleets of Vehicles

Domenico Zappalà, University Mediterranea of Reggio Calabria; Claudia Campolo, Università Mediterranea di Reggio Calabria; Carlos M. Lentisco, Ignacio Soto, Universidad Politecnica de Madrid; Antonella Molinaro, University "Mediterranea" of Reggio Calabria

92761

19 DRIVE: Dynamic Residual Information Exchange for Communication-Efficient Collaborative Perception in Autonomous Driving

Vardan Vardanyan, Tsinghua University; Zhisheng Niu, Tsinghua University, China; Sheng Zhou, Tan Chen, Tsinghua University

61787

20 Joint Broad-Range Null-Steering for Coordinated Multi-RSU MU-MIMO Transmission

Keishi Hijikata, Sojin Ozawa, Yuki Sasaki, Yuta Tsunoda, Jin Nakazato, Tokyo University of Science; Haruki Osaki, Tetsuya Iye, Kozo Keikaku Engineering Inc.; Kazuki Maruta, Tokyo University of Science

64159

21 MILP-based Thermal-aware DNN Partitioning for In-Vehicle Embedded Systems

Takumi Endo, Hiroki Nishikawa, The University of Osaka; Ittetsu Taniguchi, Takao Onoye, Osaka University

70003

22 Occlusion-Aware Multimodal Beam Prediction and Pose Estimation for mmWave V2I

Abidemi Orimogunje, ACEIoT, University of Rwanda & Hanyang University, South Korea; Hyunwoo Park, Kyeong-Ju Cha, Hanyang University, South Korea; Igbafe Orikumhi, Sunwoo Kim, Hanyang University; Dejan Vukobratovic, University of Novi Sad

57063

23 Piecewise affine control with safety guarantees for railway virtual coupling

Mehdi Zangeneh, Peter Hubbard, Tim Harrison, James Fleming, Loughborough University

42178

24 Real-world Latency Analysis of Vehicular Visible Light Communication with Multiple LED Transmitters and an Event-Based Camera

Ryota Soga, Nagoya University; Tsukasa Shimizu, TOYOTA MOTOR CORPORATION; Shintaro Shiba, Quan Kong, Woven by Toyota, Inc.; Shan Lu, Takaya Yamazato, Nagoya University

43549

25 RIC-MAE: Self-Supervised Masked Pretraining for Intermediate Collaboration in V2X Perception

Benwu Wang, Xu Li, Wenkai Zhu, Zihang Wang, Qimin Xu, Xiang He, Southeast University

90116

26 Semantic Communication Empowered Asynchronous Collaborative Perception

Chengli Yu, Guowei Liu, Southeast University; Chongtao Guo, Shenzhen University; Le Liang, Southeast University; Shi Jin, Southern University

48680

27 TEV-IDS: CAN Intrusion Detection System via Spatial Temporal-Entropy-Variation Fingerprinting

Shuo PENG, Zhihe ZHANG, WASEDA University; Go Tsuruoka, Waseda University; Tatsuya Mori, Waseda University/NICT/RIKEN AIP

29005

28 Reliability-Constrained Dual-Path Scheduling of CAN-Ethernet Traffic in TSN Architectures

SwathigaVaishnave D, IIITDM Kancheepuram; Jaishree Mayank, Indian Institute of Technology (Indian School of Mines) Dhanbad; Sivaselvan B, IIITDM Kancheepuram

90586

29 Secure Automotive Ethernet: Implementing and Benchmarking MACsec, IPsec, and TLS

Lukas Eugster, Technical University of Munich; Friedrich Wiemer, Robert Bosch GmbH; Mert D. Pesé, Clemson University; Mohammad Hamad, Sebastian Steinhorst, Technical University of Munich

Recent Results 1 Papers

67868

1 Adaptive Design of mmWave Initial Access Codebooks using Reinforcement Learning
sabrine aroua, Ericsson research; Christos A. Bovolis, Ericsson Research, Massy, France; Bo Goransson, Ericsson; Anastasios Giovanidis, mathieu leconte, Apostolos Destounis, Ericsson Research, Massy, France

83831

2 A DRL-Based Task Offloading and Service Migration Scheme for LEO Satellite Networks
Yi-Huai Hsu, Yi-Hsuan Hsu, Wei-Fan Zhan, Cho-Hung Lu, Yuan Ze University

82787

3 A Learning-driven Design for Weighted Sum Rate Maximization of MU-MISO Multi-RIS-aided Systems with Hardware Impairments
Yi-Fan Liu, Jiun-Hung Yu, Ming-Chun Lee, National Yang Ming Chiao Tung University

30831

4 Ambient Backscatter Communication Assisted by Fluid Reconfigurable Intelligent Surfaces
Masoud Kaveh, Aalto University; Farshad Rostami Ghadi, University of Granada; Riku Jantti, Alato University; Kai-Kit Wong, University College London; F. Javier Lopez-Martinez, Universidad de Granada

87845

5 AP in the sky: a scalable integrated LEO-Cell-free Massive MIMO network
Felip Riera-Palou, Guillem Femenias, University of the Balearic Islands; Màrius Caus, CTTC; Musbah Shaat, Centre Tecnològic de Telecomunicacions de Catalunya (CTTC); Victor P Gil Jimenez, M. Julia Fernández-Getino García, Universidad Carlos III de Madrid

29793

6 Benchmarking of Signal-Strength Prediction Tools on the Vienna Drive-Test Dataset
Philip Schwarzinger, Wilfried Wiedner, Technical University of Vienna; Philipp Svoboda, TU Wien

61832

7 Coordinated Learning for Route Selection in Cache-enabled Multi-Hop Networks
Emre Gures, Pavel Mach, Zdenek Becvar, Czech Technical University in Prague

42434

8 Data-Free Collaborative Training Methods for Channel State Information Compression
Yoonseong Kang, Samsung Electronics

61006

9 Decentralized Swarming Approach for Over-the-Air Phase Synchronization of Distributed Radio Nodes
Mahmoud Kabir, Mikko Valkama, Tampere University; Bo Tan, University College London

68563

10 Deep Learning Spectrum Sensing Under Correlated Snapping Shrimp Noise
Luiz G. B. Guedes, Inatel; Pedro Marcio Raposo Pereira, Felipe Augusto Pereira de Figueiredo, Rausley Adriano Amaral de Souza, National Institute of Telecommunications (Inatel)

49856

11 Delay Performance of a Multi-hop Network with Direct Links and Battery-Assisted Energy Harvesting Nodes
Amar Kumar Mishra, Indian Institute of Technology Delhi; Shankar Prakriya, Indian Institute of Technology, Delhi

20569

12 Demand- and Priority-Aware Adaptive Congestion Control for Heterogeneous V2X Service Requirements
Miguel Sepulcre, Javier Tortosa-Garcia, Javier Gozálvez, Universidad Miguel Hernandez de Elche (UMH)

92818

13 DiP-SD: Distributed Pipelined Speculative Decoding for Efficient LLM Inference at the Edge
Yaodan Xu, Sheng Zhou, Tsinghua University; Zhisheng Niu, Tsinghua University, China

54013

14 DRL-Based Adaptive Security Policy Selection Using ASCON for Software-Defined Vehicles
Harrison Kurunathan, CISTER Research Centre; Hazem Ismail Ali, Halmstad University, Halmstad, Sweden; Radha Reddy, Manipal Institute of Technology, Manipal, India; Mohamed Eldefrawy, Halmstad University, Halmstad, Sweden; Eduardo Tovar, Cister research center

59860

15 Dual-Branch Multi-Modal Learning-Based Vehicle Trajectory Prediction for Autonomous Driving
Chia-Chen Chan, Bo-Heng Yeh, Jen-Ming Wu, National Tsing Hua University; Ronald Y. Chang, Academia Sinica

66894

16 Efficient Hardware Implementations of Block Serial LDPC Decoders for 2x-LDPC Codes of Wi-Fi 8
Soonwoo Choi, Jonghyun Baik, Chaewoon Park, Eunyoung Seo, Junyoung Jeong, Samsung Electronics

32650

17 Energy-Efficient Cooperation in Multi-Connected Tethering Group for XR Applications
Muhammad Ahsen, Aalborg University, Denmark; Stefano Paris, Nokia, Paris, France; Boyan Yanakiev, Claudio Rosa, Nokia; Ramoni Adeogun, Aalborg University

72381

18 Ergodic Capacity of Uncoordinated UAV-Backscatter Networks with Random Spectral Access
Hana Aljehani, university og manchester; Abdelhamid Salem, University of Benghazi; Khairi Hamdi, University of Manchester; Khaled Rabie, KFUPM

99970

19 Evaluation of Multi-Modal Object Detection and Fusion Strategies for Automatic Train Operation
F?rat Bozkaya, Tankut Acarman, Galatasaray University

90569

20 eXplainable AI For Enhanced Trojan Detection In Autonomous Vehicle Steering Networks
Isaac Adom, North Carolina Agricultural and Technical State University; Ashraful Milton, Universitat Autònoma de Barcelona; Sunil Gaire, North Carolina A&T State University; Mahmoud Mahmoud, The University of Alabama, Tuscaloosa

34355

21 Fronthaul-Efficient and Low-Complexity Uplink Multi-User MIMO Reception Method in O-RAN Base Station
Asuka Kakehashi, Daichi Shirase, Takanobu Doi, Toshiki Takeuchi, Kazushi Muraoka, NEC Corporation

56639

22 Geometry-Dependent Sensing Outage Analysis for Bistatic ISAC With Spatial Leakage and RCS Fluctuations
Chun-Yi Wei, National Taipei University; Yu-Sin Liu, Jiun-Hung Yu, National Yang Ming Chiao Tung University

16724

23 Impact of Transmission Modes and Synchronization on DECT-2020 NR Network Performance
Isitha, Andrey Samuylov, Dmitri Moltchanov, Tampere University; Juho Pirskanen, Jussi Numminen, Wirepas Oy; Mikko Valkama, Tampere University

31556

24 Implementation and Evaluation of Multipath QUIC Scheduling Using Predicted Network Quality
Takashi Torii, Takuma Tsubaki, NTT, Inc.; Seiya Komatsu, NTT; Nobuhiro Azuma, NTT, Inc.; Takuya Tojo, NTT Network Service Systems Laboratories

40617

25 Latency-Aware Intelligent Handover Approach for Flying Vehicles in Low-Altitude Economy Networks
Sayantan Bose, National Institute of Technology Meghalaya, Sohra, India; Shikhar Verma, Kochi University of Technology; Mostafa Fouda, Idaho State University; Zubair MD Fadllulah, Western University Canada; Diptendu Sinha Roy, National Institute of Technology Meghalaya, Sohra, India

80187

26 LEO Network Quality Prediction Using Satellite Geometry and 3D Map-Based Visibility Features
Masaki Okada, NTT Inc.; Takashi Torii, Nobuhiro Azuma, NTT, Inc.; Takuya Tojo, NTT Network Service Systems Laboratories

97277

27 Low-Complexity Learning-Based Beamforming for Ultra-Massive MIMO THz Communications
Sourabh Solanki, National Institute of Technology (NIT) Warangal, India; Abuzar B. M. Adam, SnT, University of Luxembourg; Chandan Kumar Sheemar, University of Luxembourg; Zaid ABDULLAH, University of Luxemburg; Eva Lagunas, SnT, University of Luxembourg; George Alexandropoulos, National and Kapodistrian University of Athens; Symeon Chatzinotas, SnT, University of Luxembourg

55099

28 MADRL-Based NOMA Uplink Power Allocation and UAV Trajectory Design in 6G SAGIN
Yi-Huai Hsu, Zi-Jun Wei, Zhun-Sheng Chen, Chih-Chi Chang, Yuan Ze University

50651

29 Multi-Target Maneuver Coordinations: Unlocking Coordination Opportunities in Connected Automated Driving
Rafael Molina-Masegosa, Universidad Miguel Hernandez de Elche (UMH); Sergei S. Avedisov, Toyota North America R&D - InfoTech Labs; Miguel Sepulcre, Universidad Miguel Hernandez de Elche (UMH); Takayuki Shimizu, Toyota Motor North America; Javier Gozálvez, Universidad Miguel Hernandez de Elche (UMH); Onur Altintas, Toyota Motor North America R&D

70818

30 Numerology-Persistence Coupling Performance in 5G NR-V2X Sidelink Communication
Alexey Rolich, Sapienza University of Rome; Mert Yildiz, University of Rome, La Sapienza; Asmad Bin Abdul Razzaque, Sapienza University of Rome; Ion Turcanu, Luxembourg Institute of Science and Technology - LIST; Alexey Vinel, Karlsruhe Intitute of Techology; Andrea Baiocchi, Sapienza University of Rome

66005

31 On Mobility Load Balancing Opportunities in Real 5G Scenarios
Martin Trullenque, i2CAT Foundation; Oriol Sallent, Universitat Politecnica de Catalunya (UPC); David Reiss, Universitat Politecnica de Catalunya; Daniel Camps-Mur, Jad Nasreddine, i2CAT Foundation

11113

32 OTFS Receiver with Dual-Branch Processing for Fractional Doppler Mitigation in V2X Counter-Approaching Scenarios
Keiichi Mizutani, Nagoya University; Kiminobu Makino, Toyota Motor Corporation

54953

33 Quality-Aware Joint Computing and Communication Optimization in Wireless Edge Networks for AI Services with Slimmable Neural Networks
Chun-Hao Chang, Ming-Chun Lee, Bo-Hong Su, National Yang Ming Chiao Tung University

70699

34 Receiver Processing Techniques for Zak-OTFS with Superimposed Spread Pilot: A Comparison
Fathima Jesbin, Indian Institute of Science, Bangalore; A Chockalingam, Indian Institute of Science

88311

35 Resource Scaling in B5G Beam Management
Olga Galinina, Sergey Andreev, Tampere University; Robert Heath, University of California San Diego

47471

36 Self-Supervised Relevance Modelling in Autonomous Driving via Counterfactual Analysis
Luca Lusvarghi, Javier Gozálvez, Pablo Urbano Hidalgo, Universidad Miguel Hernandez de Elche (UMH)

40633

37 Short-Blocklength Convolutional Codes in RIS-Assisted Wireless Systems with a Direct Link
Monolina Dutta, IIT Bhubaneswar; Soumya P. Dash, IIT Bhubaneswar, India

68157

38 Stochastic-Geometry-aided Performance Analysis in AMR-to-AMR Communications under Task-Induced Obstructed LoS Blockages
Takeshi Hirai, The University of Osaka; Tutomu Murase, Nagoya University; Yusheng Ji, National Institute of Informatics

69141

39 Unrolled LDPC Decoder with Full Coderate Flexibility Achieving 1628 Gb/s in 28 nm CMOS
Lukasz Lopacinski, Yiyun Jian, Muhammad Nauman, IHP; Pukar Shakya, Leibniz Institute for High Performance Microelectronics; Goran Panic, IHP; Milos Krstic, IHP - Leibniz-Institut für innovative Mikroelektronik; Eckhard Grass, IHP, Germany and HU, Berlin

63207

40 WATARI: Water-Filling-Inspired Traffic-Aware Multi-Band Resource Allocation for Uplink?Downlink Asymmetry
Hirantha Abeysekera, Minoru Inomata, Yusuke Asai, Yoichi Taguchi, Kotaro Nagano, Takumi Hirosue, NTT, Inc.

89296

41 ZT-SLICE for 5G UAV Control: Cross-Layer Isolation, Continuous Authentication, and Policy Enforcement
Quazi Mamun, Charles Sturt University; Tu Dac ho, Norwegian University of Science and Technology; Kashif Mehmood, NTNU; Zhenni Pan, Waseda University

74447

42 New Sum Rate Maximization Beamformer Designs for the Multi-stream MxN MIMO X Channel
Yen-Ting Lin, Guan-Yi Wu, National Chung Hsing University; Chiao-En Chen, National Chung Hsing Univerity

71701

43 SparseCoM: Fully Sparse Collaborative Perception via Mixture of BEV Experts
Chen Xia, Ziyi Song, Qianxin Qu, Tsinghua University; Guipeng Zhang, Chinese Academy of Sciences; Sheng Zhou, Tsinghua University; Zhisheng Niu, Tsinghua University, China

27379

44 Adaptive Compressed Sensing-Aided Channel and Motion Estimation in OTFS-ISAC Vehicular Systems
Pradeep Chennakesavula, Hon Hai Research Institute; Yan-Yun Chen, Jen-Ming Wu, National Tsing Hua University

97705

45 6G NTN Waveforms: A Comparison of OTFS, AFDM and OCDM in LEO Satellite Channels
Aniruddha Chandra, Baidyanath Mandal, NIT Durgapur

25263

46 Analysis and Compensation of Receiver IQ Imbalance and Residual CFO Error for AFDM
Nimesha Gunasekara, Ebrahim Bedeer, University of Saskatchewan

58194

47 A Semi-Blind Receiver for Time-Selective Channels Using Transformer-Based In-Context Learning
Rahul Rajesh Singh, Samsung R&D India, Bangalore; A Chockalingam, Indian Institute of Science; Khushboo Mawatwal, Samsung Research India, Bangalore

84421

48 A Study on Noncoherent Communication Method Based on Quantum Operators
Nanami Yamamoto, Joe Asano, Naoki Ishikawa, Yokohama National University

35784

49 Backscatter Devices Assisted Channel Charting
Norshahida Saba, Pere Garau Burguera, Jingyi Liao, Hanan Al-Tous, Olav Tirkkonen, Aalto University; Riku Jäntti, Department of Communications and Networking, Aalto University

36364

50 Base Station Failure Recovery with Limited Learning-Based Model Queries
Qasim Haidari, Aalto University; Dariush Salami, Martti Moisio, Mikko A. Uusitalo, Nokia Bell Labs, Espoo, Finland; Olav Tirkkonen, Aalto University

32123

51 Blind Turbo Demodulation for Differentially Encoded OFDM with 2D Trellis Decomposition
Chin-Hung Chen, Eindhoven University of Technology; Yan Wu, NXP Semiconductor; Wim van Houtum, Alex Alvarado, Eindhoven University of Technology

35735

52 Channel Adaptive Digital Semantic Communications via Symbol Distortion Modeling
Xunyang Zhan, Harbin Institute of Technology; Jie Cao, Harbin Institute of Technology, Shenzhen; Tianhao Guo, Shanxi University; Zhihao Dong, Xu Zhu, Harbin Institute of Technology (Shenzhen)

22855

53 Channel Knowledge Map-Assisted Handover Scheme for Cellular-Connected UAVs
Juntao Huang, Wanlu Zhang, Chenhui Tao, Harbin Institute of Technology, Shenzhen; Jingjing Luo, Fu-Chun Zheng, Harbin Institute of Technology (Shenzhen)

12643

54 Constraint Programming Based Multi-Queue Time-Sensitive Frame Aggregation Scheduling
Xiayue Liu, Jiaqi Zuo, Xu Zhu, Yufei Jiang, Yuanqing Li, Harbin Institute of Technology (Shenzhen); Vincent K. N. Lau, The Hong Kong University of Science and Technology

47735

55 CSIT-Free Multi-Group Multicast for Overloaded mmWave Systems
Wonseok Choi, Jeongjae Lee, Songnam Hong, Hanyang University

57051

56 Data-Oriented Noncoherent Transmission Based on Short-Reference Differential Chaos Shift Keying
Handan Yak?n, Mehmet C. Ilter, Tampere University; Paschalis Sofotasios, Khalifa University (UAE) and Tampere University (Finland); Ranjan K. Mallik, Indian Institute of Technology Delhi; Mikko Valkama, Tampere University

26809

57 Designing 3GPP-Compliant Zadoff?Chu Waveforms for Joint Radar and Communication Systems
Mann Maru, Naveen Mysore Balasubramanya, Indian Institute of Technology Dharwad

61096

58 Device Selection and AP Association for Scalable Cell-Free Federated Learning with Non-IID Data
Zhihao Dong, Xu Zhu, Harbin Institute of Technology (Shenzhen); Jie Cao, Harbin Institute of Technology, Shenzhen; Danny Huang, China Mobile Group Guangdong Co., Ltd., Shenzhen Branch; Ziming Guo, Harbin Institute of Technology, Shenzhen; Vincent K. N. Lau, The Hong Kong University of Science and Technology

32920

59 Distributed Multi-point Channel Charting for Cell-Free Massive MIMO Systems
Pere Garau Burguera, Hanan Al-Tous, Olav Tirkkonen, Aalto University

55587

60 DOA Estimation for Hybrid Antenna Arrays via Noise-Marginalized Sparse Bayesian Learning
Yunxiao Qin, South China University of Technology, China; Jie Li, South China University of Technology

72023

61 Eigenvalue-Based AP Selection with Joint Power and Beamforming Optimization in Cell-Free Networks
Prabhat Gupta, University of Coimbra; Marco Gomes, Instituto de Telecomunicações - University of Coimbra; Rui Dinis, Universidade Nova de Lisboa; Akshay Jain, Nokia Bell Labs; Marko Beko, Instituto Superior Técnico, Universidade de Lisboa/COPELABS

74816

62 Energy Efficient Routing in Software-Defined In-Vehicle Networks
Yu-Hao Chen, CHIN-YA HUANG, Shan-Hsiang Shen, Tai-Lin Chin, National Taiwan University of Science and Technology

28570

63 Energy-Efficient Uplink Power Design in RIS-Enabled Mobile User Communication Systems with Learning-Based Channel Prediction
Seungcheol Oh, Taewoo Park, Korea University; Arman Ahmadian, Yonsei University; Sean Seok-Chul Kwon, California State University Long Beach; Seong-Lyun Kim, Yonsei University; Joongheon Kim, Korea University

64071

64 Evaluating Deep Reinforcement Learning Robustness for Fixed-Wing Attitude Control under Adversarial Perturbations
Samin Yasar, University of Alabama; Ahmad Alsharif, The University of Alabama; Siddhartha Bhattacharyya, Florida Institute of Technology; Mahmoud Mahmoud, The University of Alabama, Tuscaloosa

82550

65 Feature extraction of communication jamming signals based on quantum density matrix
jianyu liu, Chengzhao Shan, Heng Dong, Harbin Institute of Technology; Zhuoming Li, University of Harbin Institute of Technology

78998

66 Frequency-splitting Constant-Envelope OFDM for Simultaneous Wireless Information and Power Transfer
MengJie Chen, Lilin Dan, Haowu Li, University of Electronic Science and Technology of China

90338

67 Hierarchical Deep Reinforcement Learning Based Joint Hybrid Beamforming and Resource Allocation for Multi-User Massive MIMO-OFDM Networks
Peixuan Li, Xi'an Jiaotong University; Dichen Jiu, Xi?an Jiaotong University; Yichen Wang, Xi'an Jiaotong University

67263

68 Hybrid Beamforming Design for Near-Field Integrated Sensing and Communications
Hao Dong, Chenhao Qi, Kangjian Chen, Southeast University

51663

69 Hybrid Waveform Multiple Access for Power-Efficient Transmission
Haowu Li, Lilin Dan, Jingqi Ran, University of Electronic Science and Technology of China

43894

70 Joint Channel and Velocity Estimation for OTFS-Based CF-mMIMO ISAC Systems: A Robust Approach
Wenbo Xiong, Ziheng Li, Tong Wang, Lin Gao, Harbin Institute of Technology; Yufei Jiang, Harbin Institute of Technology (Shenzhen)

62974

71 Joint Optimization of Inference and Consensus Resources for Blockchain-Enhanced Edge AIGC Services
Licheng Ye, Harbin Institute of Technology, Shenzhen; Zehui Xiong, Queen's University Belfast; Lin Gao, Harbin Institute of Technology; Dusit Niyato, Nanyang Technological University

96913

72 Lightweight Channel Chart Informed Transformer for Localization
Hanjun Park, Pohang University of Science and Technology; Pere Garau Burguera, Hanan Al-Tous, Aalto University

56555

73 Measurement-Based Evaluation of Beam Selection Strategies in 5G under Diverse Configurations
Ivana Radojevic, Mariam Mussbah, Markus Rupp, Philipp Svoboda, TU Wien

90756

74 Mind the Noise: Sensitivity of Transformer-based Interaction-Aware Trajectory Prediction Models to Noisy Data
Shahab Salehi, Luca Lusvarghi, Miguel Sepulcre, Javier Gozálvez, Universidad Miguel Hernandez de Elche (UMH)

80786

75 Mixture-of-Experts Network For Edge-Cloud Autonomous Scene Detection
Aditya Viswakumar, Indian Institute of Technology Hyderabad; P. Rajalakshmi, NMICPS TiHAN, Indian Institute of Technology Hyderabad

86664

76 Non-Orthogonal Constant Envelope OFDMA: System Design and Performance Evaluation
Jingqi Ran, Lilin Dan, Haowu Li, Yue Xiao, University of Electronic Science and Technology of China

55877

77 On the Spatial Consistency of Sub-Terahertz Channel Characteristics for Beyond-6G Systems
Hossein Amininasab, Huda Farooqui, Dmitri Moltchanov, Sergey Andreev, Tampere University; Michele Polese, Northeastern University; Mikko Valkama, Tampere University; Josep M. Jornet, Northeastern University

15598

78 Optimization of Power, Computation Offloading, and Route Selection in Multi-Hop Networks
Muhammad Zubair Khaliq, Zdenek Becvar, Pavel Mach, Czech Technical University in Prague

47593

79 Oversampled Zak-OTFS receiver with superimposed spread pilot
Vineetha Yogesh, Indian Institute of Science, Bengaluru; A Chockalingam, Indian Institute of Science

43827

80 PAPR Reduction Using Null Space in MIMO Channel When Channel Estimation Error Exists
Risa Kubota, Tokyo University of Science; Satoshi Suyama, NTT DOCOMO, INC.; Satoshi Nagata, NTT DOCOMO INC.; Kenichi Higuchi, Tokyo University of Science

89634

81 Passive 60 GHz Azimuth Beam Steering via Binary ON/OFF Spatial Masking
Swarnagowri Shashidhar, Amod Ashtekar, Mohammed E. Eltayeb, California State University, Sacramento

49737

82 Phase-Aware Code-Aided EM Algorithm for Blind Channel Estimation in PSK-Modulated OFDM
Chin-Hung Chen, Ivana Nikoloska, Wim van Houtum, Eindhoven University of Technology; Yan Wu, NXP Semiconductor; Alex Alvarado, Eindhoven University of Technology

64982

83 Power allocation for short blocklength Sparse Regression Codes over non-coherent channels
Sai Dinesh Kancharana, VSV Sandeep, Arun Pachai Kannu, Indian Institute of Technology, Madras

65082

84 Practical Resource Allocation Based on SAB-semantic for Multi-User RIS-Aided Semantic Communications with Discrete Phase Shifts
Shih-Jung Hsu, Po-Yen Lin, National Tsing Hua University; Chih-Yu Wang, Academia Sinica; Wei-Ho Chung, National Tsing Hua University, Taiwan, R.O.C.

64371

85 RealSim-CP: A High-Fidelity Multimodal Cooperative Perception Dataset Bridging the Simulator?Real World Gap
Yuji Aizono, Ehsan Javanmardi, The University of Tokyo; Fardin Ayar, Mahdi Javanmardi, Amirkabir University of Technology; Manabu Tsukada, the University of Tokyo; Hiroshi Esaki, The University of Tokyo

25363

86 Real-World Modeling of Computation Offloading for Neural Networks with Early Exits and Splits
Jan Dan?k, Zdenek Becvar, Adam Janes, Czech Technical University in Prague

26031

87 Refined Bayesian Optimization for Beam Alignment Based on Real-World 60 GHz Indoor Measurements
Parth Ashokbhai Shiroya, Amod Ashtekar, Swarnagowri Shashidhar, Mohammed E. Eltayeb, California State University, Sacramento

42262

88 Scheduling Approaches for Wireless D2D Networks with Integrated Sensing and Communication
Shih-Hsien Chen, Chun-Yi Kuo, Ming-Chun Lee, Yu-Chih Huang, National Yang Ming Chiao Tung University

42727

89 Secrecy Performance Analysis in FD Relay-Assisted ISAC Systems Under Dual Eavesdropping Threats
Claire Naiga Serugunda, Angela Doufexi, Robert Piechocki, University of Bristol

45574

90 Self-Sustainable LEO Satellite Communications via Energy-Harvesting Stacked Intelligent Metasurfaces and Mamba-Driven Long-Term Resource Allocation
Yu-Han Ma, Po-Chen Wu, Kai-Ten Feng, National Yang Ming Chiao Tung University; Zhi Ding, University of California at Davis; Jen-Ming Wu, Hon Hai Research Institute

68077

91 Sequential-MARL-based Joint Trajectory Design and Cooperative Task Offloading in UAV-Assisted MEC Networks
Tian Xia, Southeast University; Weiwei Xia, Southeast University, P.R. China; Jianing Zhao, Yingying Xu, Feng YAN, Southeast University; Lianfeng Shen, Southeast University, P.R. China

34102

92 ShadowAuth: Uncovering 5G-AKA Vulnerabilities Using Signal Overshadowing
PeiHao Song, Shan Wang, Junchao Feng, Quan Peng, Shi Hu, National University of Defense Technology

76251

93 Spatial-Temporal Aware Multipath Routing for Load Balancing in LEO Satellite Networks
YanpengZheng, Feng YAN, Southeast University; Ruijing Zhao, Zhongtian Radio Frequency Cable Co. LTD; Fei Shen, Chinese Academy of Sciences; Weiwei Xia, Lianfeng Shen, Southeast University, P.R. China; Tiecheng Song, Southeast University

17452

94 The Impact of Directional Strong Electromagnetic Pulse Attacks on Cellular Networks
Jiaxin Du, Yangbin Jiang, Feng YAN, Zhi Hao Jiang, Southeast University; Weiwei Xia, Lianfeng Shen, Southeast University, P.R. China

62307

95 V2XState: Intent-aware Spatial Basis Attention for Cooperative End-to-end Driving
Dongyang Li, Ehsan Javanmardi, The University of Tokyo; Manabu Tsukada, the University of Tokyo

54351

96 VALISENS: A Validated Innovative Multi-Sensor System for Cooperative Automated Driving
Lei Wan, XITASO GmbH & Karlsruhe Institute of Technology; Hannan Ejaz Keen, XITASO GmbH; Prabesh Gupta, Andreas Eich, LiangDao GmbH; Michael Klöppel-Gersdorf, Marcel Kettelgerdes, Maximilian Bialdyga, Fraunhofer IVI; Alexey Vinel, Karlsruhe Intitute of Techology

65292

97 White-Box Neural Ensemble for Vehicular Plasticity: Quantifying the Efficiency Cost of Symbolic Auditability in Adaptive NMPC
Enzo Nicolás Spotorno Bieger, Matheus Wagner, Antônio Augusto Medeiros Fröhlich, Federal University of Santa Catarina

25153

98 Zone-Aware Siting and Sizing of Electric Vehicle Charging Stations Using Discrete PSO on an Enhanced IEEE 33-Bus Distribution System
Ubaid Qureshi, University of Kashmir; Peerzada Waseem Sajad Shah, university of Kashmir

Recent Results 2 Papers

16340

1 Adaptive and Robust Personalized Federated Learning with Knowledge-Driven Logits Interaction for Secure Edge Intelligence
JiangJiang Zhang, Shanxi University; Muhammad Waqas, University of Greenwich; Shanshan Tu, Beijing University of Technology; Akhtar Badshah, University of Malakand; Muhammad Taimoor Khan, George Loukas, University of Greenwich

65267

2 Aerial-to-Ground Communications Under Correlated Shadowing: An Analytical Investigation with ML Prediction
Nektarios Moraitis, National Technical University of Athens; Petros Bithas, National and Kapodistrian University of Athens; George Efthymoglou, Demosthenes Vouyioukas, Athanasios Kanatas, University of Piraeus

52346

3 AI-driven Measurement Analog Beamforming for Hybrid Extreme MIMO
Gregory Morozov, Alexei Davydov, Gregory Ermolaev, Seunghyun Lee, Sundo Kim, Samsung Research

34358

4 A Secure and Dynamic Resource Allocation Framework in Multi-Service Satellite Communication System
liu meiying, Ruohan Cao, Hui Gao, Beijing University of Posts and Telecommunications

20438

5 Asymptotic Outage Performance of RIS-aided FAS Over Rayleigh Fading Channels
Yi Zhang, Jinan University; Jintao Wang, University of Macau; Zheng Shi, Xu Wang, Di Wang, Jinan University; Guanghua Yang, JiNan University; Professor Shaodan Ma, University of Macau

44175

6 Characterization of Near-field Effects in Reconfigurable Intelligent Surface Aided V2X Links using Infinitesimal Dipole Modelling
Raju Malleboina, Atli Lemma Gebretsadik, Debdeep Sarkar, Indian Institute of Science Bangalore

30347

7 Deterministic Delay Guarantees in LEO Satellite Constellations Using Network Calculus
Prof. Ahlem Mifdaoui, University of Toulouse; Oana Hotescu, ISAE-SUPAERO, University of Toulouse; Jérôme Lacan, ISAE-SUPAERO; Thierry Leydier, Virtualité Réelle

33962

8 Distributed Frame Deduplication Mechanism for Mobile LoRaWAN Network
Gewu BU, University Clermont Auvergne; Nancy El Rachkidy, University Clermont-Auvergne

96324

9 Downlink Reference Signal Configuration for Massive MIMO by User Grouping
Hao Liu, Nokia; Yaqiong Zhao, Nokia Shanghai Bell; Fei Gao, Nokia

41775

10 Dual-Path V2N/V2V OTA Update Distribution for SDVs: Design and Experimental Evaluation
Khaoula SGHAIER, EPITA; Arslane HAMZA-CHERIF, Pierre Merdrignac, VEDECOM Institute; Ghada Gharbi, EPITA; Chahrazed KSOURI, VEDECOM Institute; Badis Hammi, Télécom SudParis; Bechir Yengui, VEDECOM; Pierre Parrend, Didier Verna, EPITA

98241

11 Exploring LLM in Semantic Communication for V2X Networks

Sihem BAKRI, Navdeep Singh, Nicola Marchetti, Trinity College Dublin

68803

12 Feasibility Assessment of Remote Driving via Latency Analysis of ITS-G5 and Cellular Networks in the MASA Living Lab

Gaetano Orazio Cauchi, Antonio Solida, Salvatore Iandolo, Marco Savarese, Martin Klapez, Enrico Rossini, Marcello Pietri, Marco Picone, Marco Mamei, Maurizio Casoni, Carlo Augusto Grazia, University of Modena and Reggio Emilia

96274

13 Graph-based IoT Traffic Classification with Adaptive Sample Length

Chikako Takasaki, Tomohiro Korikawa, Takaaki Moriya, Kyota Hattori, Daisuke Ikegami, NTT, Inc.

60703

14 Hardware-Constrained RIS Optimization for MU-MIMO Systems with Nonlinear Power Amplifiers

Bin Liu, Rafael F. Schaefer, Gerhard P. Fettweis, Barkhausen Institut, Technische Universität Dresden

25000

15 Implementation and Impact Assessment of Quantum Safe Hybrid Signature In V2X Communications

Ines ben Jemaa, IRT-SystemX; Zakaria Hebbal, Brigitte Lonc, IRT SystemX

56035

16 Intelligent Handover Management for Hybrid TN?NTN Mobility in 6G Architectures

Ons Aouedi, Tedros Salih, Hung Nguyen-Kha, University of Luxembourg; Eva Lagunas, Jorge Querol, SnT, University of Luxembourg; Joel Grotz, SES. S.A.

80416

17 Joint Latency-Energy Aware Service Placement in Vehicular Edge Computing via Graph Neural Networks Predictions and Reinforcement Learning

Kais Baccour, LaBRI and Efrei Research Lab; Youssef Ait El Mahjoub, Yessin Neggaz, Efrei Research Lab, Université Paris-Pantheon-Assas; Toufik Ahmed, CNRS-LaBRI UMR 5800, University Bordeaux, Bordeaux-INP

76217

18 Learning-Based Backoff Indicator Optimization for Random Access in 5G NR Non-Terrestrial Networks

Husnain Shahid, centre tecnològic de telecomunicacions de catalunya; Musbah Shaat, Centre Tecnològic de Telecomunicacions de Catalunya (CTTC); Màrius Caus, CTTC

79247

19 Noncoherent Bistatic Integrated Sensing and Communications-Part I: Decoding and Estimation

Husheng Li, Purdue University

91958

20 Relationship-Based Factor Estimation for Remote Monitoring Degradation in Autonomous Driving

Seiya Komatsu, NTT; Taichi Kawano, NTT Network Service Systems Laboratories; Takuma Tsubaki, NTT, Inc.; Takuya Tojo, NTT Network Service Systems Laboratories

50436

21 Remote Assisted Driving in an Indoor 5G Testbed

Jakob Meißner, Johann Nikolai Hark, Bernd Schäufele, Daimler Center for Automotive IT Innovations (DCAITI); Ilja Radusch, Fraunhofer Institute for Open Communication Systems (FOKUS)

77507

22 Resilient 6G Railway Communications via UAV-Enabled ISAC: Challenges And Future Scope

Aamer Mohamed Huroon, Li-Chun Wang, National Yang Ming Chiao Tung University

83461

23 RIS-Assisted Cell-Free Massive MIMO: RIS-MS Selection in FR1 and FR3

Alejandro de la Fuente, Fernando Galindo, Uriel García-Bárbulo, Sandra-Noemy Arana-Alegre, Jan García Morales, Universidad Rey Juan Carlos

20945

24 Stochastic Risk-Based Path Pruning for Spike-Resilient QoS in Multipath Wireless Networks

Anan Sawabe, Kohei Egashira, Yasuaki Sumiyoshi, Yusuke Shinohara, Koichi Nihei, NEC Corporation

50447

25 Subband Variable Step-size LMS based Nonlinear Digital Interference Canceller

Zhongpu Cui, Yedi Xin, Naval University of Engineering

43608

26 Towards Intelligent Computation Offloading in Dynamic Vehicular Networks: A Scalable Multilayer Pipeline

Falk Dettinger, Matthias Weiß, Baran Gül, Sruthi Mangala Suresh, Nasser Jazdi, Michael Weyrich, University of Stuttgart

36117

27 A Two-Stage RIS-SMBM MIMO Symbol Detection

Meng-Ting Weng, Hoang-Yang Lu, Mao-Hsu Yen, National Taiwan Ocean University; Jiann-Horng Chen, National Taipei University

86339

28 Defending Against Malicious Wi-Fi Activity Recognition via Signal Obfuscation using Intelligent Reflecting Surface

Yi-Hung Chiang, Chun-Cheng Su, Hung-Yun Hsieh, National Taiwan University

31764

29 DGAC: Distributed Graph Attention Coordination for Energy-efficient Collaborative Beamforming in UAV Networks

Wangliang Cui, Harbin Institute of Technology (Shenzhen); Yao Shi, Harbin Institute of Technology?Shenzhen?; Yunxu Sun, Harbin Institute of Technology (Shenzhen); Jie Deng, PengCheng Laboratory

90665

30 Sparse Newton Neural Detection for Massive MIMO Systems

Chia-Hsun Li, Mao-Hsu Yen, Hoang-Yang Lu, National Taiwan Ocean University; Jiann-Horng Chen, National Taipei University

11211

31 BLER-Oriented Deep Channel Estimation using LLR-MSE Loss

Yoshinobu Iimura, Masatoshi Ogawa, Fujitsu Limited; Takashi Seyama, Fujitsu; Nobukazu Fudaba, 1 Finity inc.

22213

32 Decentralized Sequential Detection of an Unknown Target Using Level-Triggered Sampling

Li Hu, National University of Defense Technology

48396

33 Federated Transfer Learning for Behavioral Continuous Authentication in Connected Vehicles

Okba BEN ATIA, University of Technology of Belfort-Montbéliard; Mustafa AL SAMARA, Joaan Bin Jassim Academy for Defence Studies; Ismail Bennis, University of Haute Alsace

88247

34 A Constrained Weighted Least-Squares Algorithm for Hybrid 1-D Space-Angle and TDOA Localization
Abdulellah Almalki, Huaping Liu, Oregon State University; Yanbin Zou, Shantou University

78479

35 Adaptive Multi-UAV 360-degree Video Transmission
Soya Iimura, The University of Electro-Communications; Takuya Fujihashi, Osaka University; Shunsuke Saruwatari, University of Osaka; Zhi Liu, The University of Electro-Communications

68851

36 Adaptive-Stage DASIC in OFDM-IBFD Systems for Wireless IoT
Yuya Kasai, Shinsuke Ibi, Hisato Iwai, Doshisha University

27236

37 A Data-Driven Approach for Electric Vehicle Powertrain Modeling
Eymen Ipek, Virtual Vehicle Research Gmbh

10924

38 A Hybrid Fuzzy Logic and Game-Theoretic Relay Selection Approach for Enhancing Communication Stability in Uplink Vehicle-to-HAPS Networks
Sicheng Wang, Taishin Maeda, Zhenni Pan, Shigeru SHIMAMOTO, Waseda University; Tu Dac ho, Norwegian University of Science and Technology

23195

39 A LoS-Suppressing Beam Sweeping and Tracking Method Based on Coordinate Descent Algorithm for mm-Wave ISAC System
Geyang Hua, Shuo Shen, Zhifei Wang, Qingji Jiang, Xuandi Zhang, Dongming Wang, Southeast University

75458

40 Amortized Neural SVD for XL-MIMO: Structure-Guided Factor Prediction for Beamforming and Multi-Stream Utility
Yue ZHANG, Xidian University; Yiyan Zhang, Xi'an Jiaotong University; Ruijin Sun, Honggang Jia, Chen Gong, Xidian University

36727

41 Analysis and Optimization of PAoI and FCT Under MLFQ Scheduling in Data Center Networks
Handa Xia, Wen Zhan, Xinghua Sun, Sun Yat-sen University; Pei Liu, Wuhan University of Technology; Zhiguo Zhan, ZTE Corporation

46572

42 A Novel Waveform for Multi-Target Detection in ISAC Scenarios
Sijie Wang, Jie Huang, Cheng-Xiang Wang, Southeast University

59997

43 Antenna Selection Aided Blind Uplink Interference Suppression for Cell-Free Massive MIMO Systems
Kotaro Fukue, Takeshi Kazama, Kazuki Maruta, Tokyo University of Science

46203

44 A Quantum Method for Constrained Vehicle Dynamics and Green-Wave Optimization
Leonardo Lavagna, University of Rome ?La Sapienza?; Daniele Vignarca, Stefano Arrigoni, Edoardo Sabbioni, Politecnico di Milano; Antonello Rosato, Massimo Panella, University of Rome ?La Sapienza?

78757

45 BeamSpaceNet: A Deep Learning Framework for RIS-Aided mmWave Indoor Localization with Continuous Orientation Estimation
Varun Advani, Iowa State University; Ahmed Nasser, King Abdullah University for Science and Technology; Mohamed Y. Selim, Iowa State University; Ahmed M. Eltawil, King Abdullah University of Science and Technology (KAUST)

47562

46 Bessel Beam Codebook?Based Spiral Acquisition for Optical Inter-Satellite Links
Muhammad Ramzan, Eva Lagunas, Mert Byraktar, SnT, University of Luxembourg

51657

47 Blind estimation of OTFS parameters and blind classification of OTFS-OFDM waveforms for satellite-based intelligence
Sylvain Comtet, Equans INEO Défense; Sébastien Houcke, Francois-Xavier Socheleau, IMT Atlantique; Sylvain Merlet, Equans INEO Défense

37246

48 BlockSecRT-DETR: Secure and Efficient Federated Transformers for Real-Time Object Detection in ITS
Mohoshin Ara Tahera, Sabbir Rahman, Shuvalaxmi Dass, University of Louisiana at Lafayette; Sharif Ullah, University of Central Arkansas; Mahmoud Abouyessef, North Carolina A&T State University,

24758

49 Configuration Tuning for ISAC: Cost-Efficient Adaptation via RACE-CMA
Ashkan Jafari Fesharaki, 6GIC, ICS, University of Surrey; Yasser Mestrah, InterDigital; Ibrahim Hemadeh, InterDigital Europe, Ltd; Yi Ma, University of Surrey; Mohammad Heggo, Arman Shojaeifard, Ahmet Serdar Tan, InterDigital; Rahim Tafazolli, University of Surrey; Alain Mourad, InterDigital Communications

11908

50 Cost-Aware AoI Scheduling under Heterogeneous Average and Probabilistic Constraints: To Sample or to Retransmit?
Jiale Wu, Shenzhen University,; Haoyuan Pan, Shenzhen University

37661

51 Deep Reinforcement Learning Based Link Adaptation With Wideband CQI Feedback
shamsa kanwal, Aalto university; Hanan Al-Tous, Aalto University; Mario Costa, Pekka A.Ranta, Nokia; Olav Tirkkonen, Aalto University

14712

52 Downlink User Scheduling Optimization in Cell-Free Massive MIMO Networks
Qingqing Xie, Southeast University; Yue Wu, Purple Mountain Laboratories; Pengzhe Xin, Jiamin Li, Pengcheng Zhu, Southeast University; Chunguo Li, Southeast University, Nanjing, China; Xiaolong Ni, Yu Liu, Ticom Tech; Dongming Wang, Southeast University

77207

53 DQN-based Sequential Control of Bundle Transfer Order in Relay-Assisted LEO Satellite Constellation Collaboration Systems
Ryohei Chiba, Hiroaki Hashida, Yuichi Kawamoto, Nei Kato, Tohoku University; Yohei Hasegawa, Masayuki Ariyoshi, NEC Corporation

62549

54 DWFL-net: Dynamic Weighted Federated Learning for Wireless Interference Recognition in Fading IoT Networks
Xiao Liang, naval university of engineering; Songhu Ge, Yu Guo, Zhongpu Cui, Yedi Xin, Naval University of Engineering

45859

55 Dynamic Attention?Convolution Selection Module for YOLO-based Object Detection
Ala Eddine HSAIRI, University of Carthage

17284

56 Fairness-Oriented Latency Optimization for Strictly Energy-Constrained Cell-Free Mobile Edge Computing Networks
Qinlei Xu, Yuelin Zhong, Yu Qian, Pengcheng Zhu, Southeast University

95178

57 Grassmann Quantization for Time-Domain Precoding in Multi-User MIMO-OFDM Communications

Kazuki Tanaka, Yokohama National University; Hiroki Iimori, Yuto Hama, Dr. Chandan Pradhan, Dr. Szabolcs Malomsoky, Ericsson Research; Naoki Ishikawa, Yokohama National University

79660

58 H-Matrix Optimization via Angular Phase Shift for MIMO Capacity Enhancement

Md Mohaiminul Haque, Mikko Heino, Jukka Lempiäinen, Tampere University

15209

59 Improving End-to-End Autonomous Vehicle Steering Control Through Activation and Filtering Selection in DAVE-2 CNN Models

mohamed elshall, university of north dakota; Jeremiah Neubert, university of north Dakota

82689

60 Interference-Aware Joint Trajectory and Resource Optimization for Replacement Control in Multi-UAV Networks

Kai Maruo, Tatsuaki Kimura, Doshisha University

46503

61 Interference Management in Wideband Cell-Free MIMO via Joint RSMA Beamforming and Subcarrier Assignment

Pan Zhou, Yuanmeng Song, Jiafei Fu, Pengcheng Zhu, Southeast University

33251

62 Learning Invariant Representations for Large-Scale Indoor Positioning: A Robust 5G Fingerprint Encoder via Contrastive Learning

Yuchen Ma, Jiyu Jiao, southeast university; Jianping Zhu, Southeast University; Rui Deng, Xiaojun Wang, southeast university; Peng Liu, Yuqing Li, Purple Mountain Laboratories

26066

63 Lightweight Geometric Foreground Perception for Roadside LiDAR with Unified Semantics

Yinkai Huang, Shanghai Institute of Microsystem and Information Technology; Jiahui Mao, Chong Tan, Hong Liu, Shanghai Institute of Microsystem and Information Technology CAS; Chunlei Zheng, Shanghai Institute of Microsystem and Information Technology; Min Zheng, Shanghai Institute of Microsystem and Information Technology CAS

14951

64 Low-Complexity Bayesian Learning with Adaptive Matrix Optimization for OTFS Channel Estimation

Xueping Lan, Xiaoxu Zhang, Southwest Jiaotong University; George Karagiannidis, Aristotle University of Thessaloniki; Ming Xiao, KTH; Jinfu Li, Southwest Jiaotong University; Zheng Ma, SOUTHWEST JIAOTONG UNIVERSITY

85874

65 Measurement-Based Human Blockage Analysis and Modeling in Underground Parking Lots at 3.5 GHz

Lei Yang, Beijing jiaotong University; Ke Guan, Beijing Jiaotong University; Danping He, Beijing Institute of Technology; Hao An, Beijing jiaotong University; Bei Zhang, MediaTek (Beijing) Inc.; Junyi Yu, Beijing Qianjing Technology Co., Ltd.; Zhangdui Zhong, Beijing Jiaotong University

91212

66 Multi-Agent Reinforcement Learning for Autonomous Drone Coordination in Smart Manufacturing Environments

Nesrine Maatouk, SupCom

72264

67 Multi-Sensor Multi-Target Tracking with Out-of-Sequence Measurements

Yunxiao Peng, Shanghai Institute of Microsystem and Information Technology, CAS; Chengping Ma, Dongxu Song, Shanghai Institute of Microsystem and Information Technology; Xiaoxiao Zhuo, Liang Tang, Yu Zhao, Shanghai Institute of Microsystem and Information Technology, CAS

73675

68 Near-Optimal LDPC Decoder Using Gradient-Based Gibbs Sampling

Yixiao Cao, Southeast University; Xingyu Zhou, National Mobile Communications Research Laboratory; Jing Zhang, Hengtao He, Le Liang, Southeast University; Yong Li, CETC-54; Xiao Li, Southeast University; Shi Jin, Southern University

65649

69 OAM Wireless Communication in Sparse Multipath Environments: Modeling, Crosstalk Analysis and Capacity Enhancement

Shengmin Dai, Fangmin He, Ze Wang, Naval University of Engineering

13049

70 Position-Aided Two-Stage Doppler Frequency Offset Estimation for Millimeter-Wave 5G NR In Ultra-High-Speed Moving Scenarios

Xinyu Li, ??????; Dan Fei, Beijing Jiaotong University; ??, ????????????????; Peng Zheng, Beijing Jiaotong university; ???, Chen Chen, National Key Laboratory of High-Speed Maglev Vehicle Technology; Bo Ai, Beijing Jiaotong University

65398

71 Practical RIS-Assisted RF Energy Harvesting via Hierarchical Beam Search and Tracking

Liuqun ZHAI, Junyi Wang, Hongyao Liu, City University of Hong Kong

39391

72 Precoding-Oriented CSI Feedback Design with Mutual Information Regularized VQ-VAE

Xi Chen, Rutgers University; Homa Esfahanizadeh, Foad Sohrabi, Nokia Bell Labs

81356

73 Predictive and Spatially Aware Scheduling in Flexible Duplexing for Deterministic Communications

Syed Morsleen Riaz, Universidad Miguel Hernandez de Elche (UMH); Baldomero Coll-Perales, Universidad Miguel Hernandez de Elche; Mª Carmen Lucas Estañ, Javier Gozálvez, Miguel Sepulcre, Universidad Miguel Hernandez de Elche (UMH)

48479

74 Proactive Compute-Memory Co-Orchestration for Robust Point Cloud Streaming on Mobile Devices

Wentao Cui, Jia Chen, Beijing Jiaotong University; Chengxiao Yu, Peng Cheng Laboratory; Xu Huang, Chenxi Liao, Dongsheng Qian, Shang Liu, Beijing Jiaotong University; Qi Liu, China Unicom Company; Meng Song, Smart City Research Institute

66723

75 Repairing Reed?Solomon Codes with Multiple Helper-Group Degrees

Tao Wang, Zhiping Shi, Li Deng, University of Electronic Science and Technology of China; Juan Yang, Guilin University of Aerospace Technology

74808

76 Representation Alignment via Reference Distributions for Non-IID Federated Learning

Xiaodong Li, Yulong Gao, Yingxi Li, Harbin Institute of Technology

62895

77 RIS-Assisted Cooperative ISAC for Low-Altitude Economy
Ying Zhang, Zeqi Hao, Harbin Institute of Technology, Shenzhen; Xu Zhu, Tingting Zhang, Harbin Institute of Technology (Shenzhen)

17652

78 Software Radio-based Laboratory Experiment of Blind Adaptive Array Interference Suppression for LTE-WLAN Spectrum Superposing
Takeshi Kazama, Kotaro Fukue, Tokyo University of Science; Hideya So, Kogakuin University; Kazuki Maruta, Tokyo University of Science

57171

79 Sparse Radio Map-based Layout Tomographic Reconstruction
Sora Watanabe, Norisato Suga, Shibaura Institute of Technology

56252

80 Traffic-Aware Network Sharing: A Data-Driven Evaluation across Cluster Combinations
Alessandro Caramia, Maoquan Ni, Daniela Renga, Politecnico di Torino; Loutfi Nuaymi, IMT Atlantique; Michela Meo, Politecnico di Torino

54079

81 Unified Communication Anti-Interference Algorithm Employing Blind Source Separation Under Strong Adversarial Conditions
Yingxi Li, Yulong Gao, Xiaodong Li, Harbin Institute of Technology

21038

82 Vision-aided Contrastive Pre-training Framework for WiFi CSI Sensing
Daichi Sakai, Takayuki Nishio, Institute of Science Tokyo

39910

83 Wideband holographic channel estimation: Enabling RF-domain signal processing
Jindiao Huang, Haifan Yin, Huazhong University of Science and Technology

W2 - 2nd International Workshop on Intelligent Aerial and Spaceborne Systems for 6G (6G SAGA) Papers

36612

1 AI-Native End-to-End Link Management over SAGIN via Anomaly-Resilient Prediction for 6G In-Flight Communications
Sayantan Bose, National Institute of Technology Meghalaya, Sohra, India; Shikhar Verma, Kochi University of Technology; Mostafa Fouda, Idaho State University; Zubair MD Fadllulah, Western University Canada; Diptendu Sinha Roy, National Institute of Technology Meghalaya, Sohra, India

75279

2 Learning Compact Terrain-Context Representations for Feasibility-Aware Offline Reinforcement Learning in UAV Relaying Networks
Joseanne Viana, UC3M; Viswak R Balaji, University College Cork; Boris Galkin, Lester Ho, Holger Claussen, Tyndall National Institute

30319

3 RL-based Resource Allocation in NOMA-Enabled NTN for Massive Machine-Type Communications
Ti Ti Nguyen, SnT, University of Luxembourg; Duc-Dung Tran, University of Luxembourg; Vu Nguyen Ha, SnT, University of Luxembourg; Hung Nguyen-Kha, University of Luxembourg; Giorgio Taricco, Politecnico di Torino; Eva Lagunas, Symeon Chatzinotas, SnT, University of Luxembourg

56148

4 Terrain-Aware Joint Optimization of HAPS Position and Cell Configuration for Tunable Throughput?Coverage Trade-off
Wataru Takabatake, Koji Tashiro, Kenji Hoshino, SoftBank Corp.; Tomoaki Ohtsuki, Keio University

15513

5 When LEO Backhaul Bursts Hit the RAN: QoE-Aware PRB Control to Absorb NTN Dynamics
Suneet Kumar Singh, NTNU; Tu Dac ho, Stanislav Lange, Thomas Erich Zinner, Norwegian University of Science and Technology; Zhenni Pan, Shigeru SHIMAMOTO, Waseda University

41010

6 AI-Driven Semantic Communication for Robust Perception Sharing in 6G Space?Air?Ground Integrated Mobility Systems
Jiaxin Fan, Waseda Univeristy; Zhenni Pan, Jun Wu, Waseda University

74115

7 Capacity Analysis of Weibull Fading Channels for Satellite-Ground Integrated Communications
Aiwei Lei, Zhengzhou University; Di Zhang, Sun Yat-sen University; Aimin Li, Middle East Technical University; Evgeny Khorov, Russian Academy of Sciences

93209

8 FT8-Based Ionospheric Condition Estimation for Aerial and Spaceborne Communications
Yukiko Tanabe, University of Waseda; Kazutoshi Yoshii, Shigeru SHIMAMOTO, Waseda University

65917

9 Game-Theoretic Trajectory Planning with Sensing-Based Intention Estimation for AMRs
Keigo Okano, Toru Namerikawa, Keio University

51189

10 MMDRL-Based Adaptive Parameter Optimization in UAV Swarm Network
Mingyuan Wang, Ming Lei, Rongpeng Li, Zhejiang University

58052

11 Mobility-Aware Handover Optimization with DRL 3D Cell-Free UAV Access in SAGIN
Kasun Prabhath, CISL, ECE Department, University of New Mexico; Sudharman K. Jayaweera, University of New Mexico

W3 - 2nd Workshop on AI-Driven Connectivity for Vehicular and Wireless Networks Papers

23101

1 Characterizing the Computational Feasibility of AI Video Analytics Across Edge, Fog, and MEC in Urban Intelligent Transportation Systems
Elena Mariolina Galdi, Marco Savarese, Gaetano Orazio Cauchi, University of Modena and Reggio Emilia; Paolo Burgio, Università degli studi di Modena e Reggio Emilia; Davide Bertozzi, University of Manchester; Andrea Marongiu, Carlo Augusto Grazia, University of Modena and Reggio Emilia

28327

2 Deep reinforcement learning-based MLO traffic allocation for OFDMA transmission in IEEE 802.11be networks
Foissey, Université-Paris-Saclay; Lila Boukhatem, Paris-Saclay University, France; Megumi Kaneko, National Institute of Informatics

29305

3 Estimating Timing Advance for Sub-THz Distributed Systems from Sub-10 GHz Channel State Information
Nishant Gupta, Linköping University; Muris Sarajlic, Ericsson Research, Lund, Sweden; Erik G. Larsson, Linköping University

87571

4 TinyML-Enabled Priority-Aware V2X Communication for Fog?Edge Emergency Vehicles
S Hemath Durga Kumar, Ch Madhu Bhushan, Surayya A, Firoj Gazi, SRM University AP; Md Muzakkir Hussain, Fachhochachule Dortmund

16002

5 UE Count Forecasting via Transformer-Based Mobility Decomposition and Cross-Cell Propagation Modeling
Yoshiaki Nishikawa, Eiji Takahashi, NEC Corporation

60789

6 A Dynamic Caching Method for Named Data Networking in Vehicular Ad Hoc Networks
Satoshi Nishino, Masami Yoshida, Taku Noguchi, Ritsumeikan University

63652

7 AI-Driven Multi-Layer Federated Split Learning for Hardware-Impaired Multi-Cell 6G Edge Networks with Dynamic zCDP
Wenjie Wang, Jianxin Dai, Nanjing University of Posts and Telecommunications; Zhaohui Yang, Zhaoyang Zhang, Qianqian Yang, Zhejiang University; Xiangzheng Si, CRSC Research and Design Institute Group Co.,Ltd; Yang Sun, he CRSC Research Design Institute Group Co.,Ltd.,; Kun Yang, Zhejiang University

98612

8 Comparative Study of High-Speed Ising Machines for Optimization to Wireless Resource Allocation Problems
Jialu Xing, Jin Nakazato, Tokyo University of Science; Maki Arai, Shibaura Institute of Technology; Kensuke Inaba, Toshimori Honjo, Hiroki Takesue, NTT Corporation; Kazuyuki Aihara, The University of Tokyo; Mikio Hasegawa, Tokyo University of Science

94473

9 Diffusion-Based Covert Semantic Communication over Time-Varying Channels
Riku Kurahashi, Goki Sawada, Tokyo University of Science; Shun Kojima, The University of Tokyo; Kazuki Maruta, Tokyo University of Science

66196

10 Dynamic Channel Prediction Method Based on Multi-Scale Transformer
Rong Zhao, Liyan Li, Rongpeng Li, Zhejiang University

48989

11 Experimental Evaluation of High-Frame-Rate OCC Using Clock Offsets in Image Sensor Arrays
Yuto Okada, Yuta Furukawa, Tokyo Unicersity of Science; Daisuke Hisano, Osaka University; Yu Nakayama, Tokyo University of Agriculture and Technology; Kazuki Maruta, Tokyo University of Science

57469

12 Fast Weight Derivation for Phase-Controlled Massive MIMO Null-Space Expansion with Analog Beamforming
Masaya Ueda, Tokyo Unicersity of Science; Yuta Tsunoda, Tokyo University of Science; Chun-hsiang Huang, Koji Ikuta, Kyocera Corporation; Kazuki Maruta, Tokyo University of Science

17377

13 Null-Space Expansion for OTFS-Based Downlink MU-MIMO Transmission
Yuki Sasaki, Tokyo University of Science; Omid Abbassi Aghda, NOVA University of Lisbon; Salah Berra, National institute informatics Tokyo; Rui Dinis, Universidade Nova de Lisboa; Kazuki Maruta, Tokyo University of Science

86495

14 Propagation Delay-Based Localization for mmWave Distributed MIMO Systems in Multipath Environments
Mohd Adnan, University of Aveiro; Jin Nakazato, Tokyo University of Science; Adão Silva, DETI / Instituto de Telecomunicações / University of Aveiro; Rui Dinis, Universidade Nova de Lisboa; Lukasz Krzymien, Nokia Solutions and Networks, Mobile Networks, Wroclaw, Poland

99809

15 SNR-Adaptive Optimal Threshold Design for Energy Detection in Dynamic Spectrum Access
Sushila, National Yang Ming Chiao Tung University; Jane-Hwa Huang, National Chi Nan University; Chih-Min Yu, Chung Yuan Christian University; Li-Chun Wang, National Yang Ming Chiao Tung University

19150

16 UAV Flight Trajectory Planning for Wireless Power Transfer Using Cooperative Beamforming
Yutaro Kimura, Hayato Taniguchi, Tomotaka Kimura, Jun Cheng, Doshisha University

41573

17 UAV Trajectory Planning Based on Centroids of Ground Device Positions for SAGIN
Hiroyuki Nishikawa, Tomotaka Kimura, Jun Cheng, Doshisha University

W4 - 2nd Workshop on Shaping the Future of Flight: Innovations in Advanced Air Mobility (AAM) Papers

98969

1 Predictive GNSS Signal-Quality--Driven Receiver Adaptation for Robust UAV Navigation
Akash Kumar Mandal, Indian Institute of Technology Delhi; Krittika Choudhuri, MCKV Institute of Engineering; Ashik Paul, Institute of Radio Physics and Electronics; Ajay K Poddar, Synergy Microwave Corp.; Ulrich Rohde, Rohde & Schwarz GmbH & Co KG, Munich, Germany; Swades De, Indian Institute of Technology Delhi

12676

2 Air Cells: Digital Building Blocks of Airspace for Advanced Air Mobility
Mathias Kidane, Logan McCorkendale, Zachary McCorkendale, Kamesh Namuduri, University of North Texas; Ravi Subramanian, Hermes Autonomous Air Mobility Solutions

27993

3 Ground Control Station for Managing Airspace Operations in Advanced Air Mobility
Mathias Kidane, Kamesh Namuduri, Zachary McCorkendale, Logan McCorkendale, University of North Texas; Pavan Sai Kumar Reddy Thummala, Syam Narayanan S, P. Rajalakshmi, Indian Institute of Technology Hyderabad

63931

4 A DRL-based Communication Scheme for 6G UAV Systems
Vu Khanh Quy, Hung Yen University of Technology and Education; Abdellah Chehri, Royal Military College of Canada; Vi Hoai Nam, Hung Yen University of Technology

70202

5 FAS mounted UAVs for 6G Networks Localization
Nagla Abuzghaia, University of Benghazi; Naila Elmangosh, College of Electrical and Electronic Technology; Abdelhamid Salem, Ahmed Elbarsha, University of Benghazi; Khaled Rabie, KFUPM

W5 - 6-DCIoT: 6G-Driven Distributed Computing for IoT in Terrestrial- Non-Terrestrial and Vehicular Papers

81976

1 Meta-Learning Based Grouped RIS Phase Optimization for Fast Adaptation in Dynamic Wireless Channels
Vikash Kumar Bhardwaj, IIT BHU Varanasi; Mahendra K. Shukla, Indian Institute of Information Technology, Gwalior; Prasenjit Chanak, IIT BHU Varanasi; Dr Om Jee Pandey, IIT BHU

32905

2 Reliable Message Delivery in Direct-to-Satellite IoT: Some Preliminary Results
Sonu Rathi, BML Munjal University Gurugram; Siddhartha S. Borkotoky, Indian Institute of Technology Bhubaneswar, India

11816

3 Rethinking NB-IoT Downlink Synchronization for LEO-NTN: A Novel Overhead Reduction Method and Measurement-Based Evaluation
Ömer Lütfü Karakelle, TÜB?TAK B?LGEM; Erhan Karakoca, TUBITAK BILGEM; Bengü Bilgiç Keskin, TÜB?TAK B?LGEM; ?brahim Hökelek, TÜB?TAK; Ali Gorcin, Istanbul Technical University; Halim Yanikomeroglu, Carleton University

21404

4 Transfer Learning?Enabled Graph Attention?Based RIS Element Grouping for Scalable Wireless Communications
Vikash Kumar Bhardwaj, Anurag Kamboj, IIT BHU Varanasi; Mahendra K. Shukla, Indian Institute of Information Technology, Gwalior; Rajesk K. Pandey, IIT BHU Varanasi; Dr Om Jee Pandey, IIT BHU

42932

5 Optimized Relay-based Quantum Key Distribution for Terrestrial/Non-terrestrial Backhaul Networks
Saurav Kumar Singh, Sumana Maiti, IIT Bhubaneswar; Ayan Mondal, IIT Indore; Atri Mukhopadhyay, IIT Bhubaneswar

92521

6 Hierarchical Deep Reinforcement Learning for Communication and Computation Resource Management in Heterogeneous Space-Air-Ground Integrated Networks
Xiaomin Liu, Yujie Peng, Southeast University; Xiaoqin Song, Nanjing University of Aeronautics and Astronautics; Tiecheng Song, Southeast University

10803

7 Trustless-by-Design Security Framework for distributed IOT of 6G Non-Terrestrial Networks
Chandramouli palli, Indian Institute of Technology -Khargpur; Dr.Sajal Sarkar, Power Grid Corporation of India Ltd; Aneek Adhya, Indian Institute of Technology Kharagpur

W6 - 6G-empowered Robotic Vehicles for Sustainable Development (The Fourth VeSUS) Papers

84011

1 DS-Net: A Lightweight Defect Sensing Network for 6G MEC-Enabled Inspection Robots
Guangmiao Kang, Wuhan University of Technology; Yi Zhong, School of Information Engineering, Wuhan University of Technology; Tianren Ming, Northern Kentucky University; Yi Han, Wuhan University of Technology

23464

2 EA-IGRL: Energy-Efficient Computation Offloading for 6G-Empowered Robotic Vehicles
Yuxuan Xiao, Han Xiao, Chuxing Fang, Changqiao Xu, Beijing University of Posts and Telecommunications

37677

3 Knowledge Distillation Driven Semantic NOMA with GAN Refinement for 6G Robotic Vehicle Networks
Qifei Wang, Beijing institute of technology; Zhen Gao, Beijing Institute of Technology; Li Qiao, University of Hong Kong; Ziwei Wan, Beijing Institute of Technology; De Mi, Birmingham City University; Dapeng Li, Ying Sun, Beijing Institute of Technology

13262

4 Reliability-Aware Multimodal Perception for 6G-Empowered Robotic Vehicles
xiangning Duan, Weijia Feng, Ruojia Zhang, Rui Lan, Tianjin Normal University; Chenyang Wang, Shenzhen University; Xiaoqiang Zhu, Beijing Jiaotong University; Wenjuan Wu, Tianjin Normal University

W7 - 7th International Workshop on Decentralized Technologies and Applications for IoT (D?IoT) 2026 Papers

58793

1 Blockchain-Assisted Decentralized Federated Learning for Trustworthy Edge-IoT Systems
Muhammad Irfan Younas, Sukkur IBA University; Ali Hassan Sodhro, Fatiha Djebbar, University West Trollhattan, Sweden; Sandeep Pirbhulal, Norwegian Computing Center

49056

2 Feasibility and Efficiency Analysis of Distributed Byzantine-Tolerant Consensus on Securing Internet of Things
Yuwei Le, Purple Mountain Laboratories; Rui Jiang, Yiheng Jiang, Southeast University; Jixing Wei, Purple Mountain Laboratories; Haifeng Shan, Jiangsu Unmanned Technology R&D and Operation Center; Jiaheng Wang, Yongming Huang, Southeast University

83629

3 HAPPO: Heuristic Assisted Proximal Policy Optimization for Dynamic Microservice Placement in Vehicular Edge Computing
Surayya A, SRM University AP; Md Muzakkir Hussain, Fachhochachule Dortmund

43417

4 Machine Learning-driven Soft-Output MIMO Detection for Reliable and Scalable Edge- IoT Communications
saleem ahmed, ahlia university; Ahmed M. Kassem, College of Engineering, Ahlia University, Manama, Kingdom of Bahrain.

87350

5 Multi-Tier Edge Intelligence Using Distributed Learning for Resilient 6G Non-Terrestrial Networks
Nawaz Ali, university of calabria, Rende, Italy; Bhagwan Das, School of Technology, Torrens University Australia; Gianluca Aloi, University of Calabria, Rende, Italy; Pasquale Pace, University of Calabria - RENDE; Ali Hassan Sodhro, Kristianstad University; Magnus Johnsson, Department of Computer Science, Kristianstad, Sweden

21820

6 Securing AI-as-a-Service Platform through Blockchain and Smart-Contracts
Ali Nadar, Jérôme Härri, EURECOM

25381

7 Securing IoT with AI-based Cyberattack Detection Models using Real-World Testbeds and Datasets
Riku Lehkonen, University of Jyväskylä; Knut Selstad, University of Agder; Sandeep Pirbhulal, Habtamu Abie, Norwegian Computing Center; Ismail Ari, Ozyegin University

68934

8 TrustChain-FL: Lightweight Blockchain-Assisted Trust Aggregation for IoT-Enabled Decentralized Federated Learning
Muhammad Babar, Prince Sultan University

31282

9 Zero-Knowledge Inspired Provenance for Trustless Federated Learning in Decentralized IoT Systems
Mir Hassan, Sergio Arnoldo Jofre, Giedre Sabaliauskaite, Mykolas Romeris University; Nawaz Ali, university of calabria, Rende, Italy; Ali Hassan Sodhro, Kristianstad University; Nihan Kahraman, Yildiz Technical University

88679

10 Unified Threat to Control Framework with NLP-Assisted Control Harmonisation Across IT, OT, and IoT
Fatiha Djebbar, Ali Hassan Sodhro, University West Trollhattan, Sweden

36598

11 Adversarial Insight: A Visual Knowledge Graph of Maritime Cyber Threats
Scott Nash, Muhammad Muzammal, Hamid Jahankhani, Northumbria University

30565

12 AI-Powered Centralized Fashion System Using Web Scraping and Diffusion Model Based VTON
Tushar Kanjwani, Hammad ul Hassan, Usama Baloch, Sukkur IBA University

36821

13 Explainable Fake News Detection Using BERT with Advanced Stylometry and Robust Fusion
Saqib Hussain, Biju Issac, Muhammad Muzammal, Northumbria University

85605

14 Green Energy-Aware Blockchain Integrated Edge Cloud for Public Transportation Applications
Abdullah Lakhan, Dawood University of Engineering and Technology; Tor-Morten Grønli, Kristiania University College; Magnus Johnsson, Ali Hassan Sodhro, Department of Computer Science, Kristianstad, Sweden

27215

15 LLM-Assisted Stateful Fuzzification of Electric Vehicle Charging Protocol
Nima Valizadeh, Cardiff University; Devki Nandan Jha, Tomasz Szydlo, Newcastle University; Omer Rana, Cardiff University; Rajiv Ranjan, Newcastle University

46727

16 Profiling-Driven Hybrid Scheduling for Energy-Efficient IoT Edge Acceleration on CPU--GPU--FPGA Platforms
Rupinder Kaur, Toronto Metropolitan University; Arghavan Asad, Algoma University; Farah Mohammadi, Toronto Metropolitan University; Yazan Otoum, Algoma University

W8 - 10th Workshop on Connected Intelligence for IoT and Industrial IoT Applications- C3IA Papers

81215

1 An Applicable DRL Approach for Beamforming and Resource Allocation in RIS-assisted NOMA-ISAC 6G Communication
Mahdi Nouri, Sharif university of technology; Sima Sobhi-Givi, University of Mohaghegh Ardabili; Hamid Behroozi, Sharif University of Technology; Zhiguo Ding, Nanyang Technological University; Md Jalil Piran, Sejong University

37110

2 Ergodic Capacity of Uncoordinated UAV-Backscatter Networks with Random Spectral Access
Hana Aljehani, university og manchester; bdelhamid Salem, University of Benghazi, Libya; Khairi Hamdi, University of Manchester; Khaled Rabie, KFUPM

90231

3 Federated Edge Learning Framework for UAV-Assisted IoV Services

Vu Khanh Quy, Hung Yen University of Technology and Education; Abdellah Chehri, Royal Military College of Canada; Linh, https://utehy.edu.vn; Dang Nhat Minh, Nguyen Gia Ba, Pham Anh Thu, Hung Yen University of Technology and Education

44885

4 Semi-Blind Detection in M-ary Signaling based Uplink Cell-Free mMIMO Industrial IoT Networks

N V Divya Lakshmi, Indian Institute of Technology, Mandi; Dr. Adarsh Patel, SCEE, Indian Institute of Technology Mandi, HP

W9 - AI-driven Semantic Communications Papers

85514

1 Deep Reinforcement Learning for Intelligent UAV-assisted Secured Semantic Communications

Gaurav Kumar Pandey, Matus Dopiriak, Technical University of Kosice, Slovakia; Devendra Singh Gurjar, National Institute of Technology Silchar; Dr. Suneel Yadav, Indian Institute of Information Technology Allahabad; Juraj Gazda, Technical University of Kosice, Slovakia

90438

2 Large Language Model-Based Semantic Communication System for Image Transmission

soheyb ribouh, university of Rouen Normandy; Osama Saleem, INSA Rouen

23827

3 Secure-SFBL: Authenticating Generative Semantic Streams for Autonomous Agents

Quazi Mamun, Manoranjan Paul, Charles Sturt University

30008

4 Toward a Unified Semantic Loss Model for Deep JSCC-based Transmission of EO Imagery

Ti Ti Nguyen, Thanh-Dung Le, Vu Nguyen Ha, SnT, University of Luxembourg; Duc-Dung Tran, Hung Nguyen-Kha, DINH-HIEU TRAN, Carlos Luis Marcos Rojas, University of Luxembourg; Juan Merlano Duncan, Symeon Chatzinotas, SnT, University of Luxembourg

48376

5 Computation offloading framework based on reconstruction-free semantic communication

Adam Janes, Zdenek Becvar, Jan Dan?k, Czech Technical University in Prague

56392

6 Spatial-Frequential Adaptive Learned Image Transmission for Precoded MIMO Systems

Yiding LI, Zijian Liang, Kai Niu, Ping Zhang, Beijing University of Posts and Telecommunications

W10 - Edge Intelligence meets AI-Native RAN: Theory, Algorithm and Implementation Papers

71691

1 Adaptive Swin Transformer Partitioning over AI-RAN Networks

Nguyen Thanh Tam, Yong Hao Pua, Van Tuan Ngo, Ngo Van Mao, Jihong Park, Binbin Chen, Tony Q.S. Quek, Singapore University of Technology and Design

52817

2 Knowledge-Assisted Queue-Aware Spatio-Temporal 2-D Short-Packet Coding for URLLC

Yi Jia, Yuxuan Li, Southeast University; Hongxin Lin, Purple Mountain Laboratories; Yongming Huang, Southeast University

91344

3 AoI-Aware Data Valuation for Closed-Loop Control in O-RAN

Qiao Yajuan, China Telecom Research Institute; Zexu Li, China Telecom Research Institute, Beijing; Xiaoyu Chi, Beijing University of Posts and Telecommunications; Yue Wang, China Telecom Research Institute

23064

4 Joint Constellation Shaping and Deep Learning-based Symbol Decision in OFDM Systems

Jiayi Liu, Luhan Wang, Haozhe Jin, Anpei Li, Gangyu Bai, Zhaoming Lu, Beijing University of Posts and Telecommunications

73132

5 Model-Driven Hierarchical Graph Neural Networks for Partially-Connected Precoder Design

Chenyang Yi, National Mobile Communications Research Lab, Southeast University; Wei Xu, Southeast University; Zhaocheng Wang, Tsinghua University; Derrick Wing Kwan Ng, University of New South Wales; Huahua Xiao, ZTE; Zhaohua Lu, ZTE Corporation, Shenzhen, China

60273

6 Transformer-Based Intelligent Signal Detector for Media-Based Modulation

Xu Wu, Ming Lei, Xi Chen, Zhejiang University

W11 - Emerging LEO Satellite Constellation Communication and Network Technologies for 6G Ubiquitous Papers

30746

1 Distributed Massive MIMO Ground Station With Small Multi-beam Antennas for LEO Constellations

Koyo Tategami, NTT; Daisuke Goto, Kiyohiko Itokawa, Tomohiro Tokuyasu, Fumihiro Yamashita, NTT Corporation

96780

2 Handover Mechanisms for Integrated Terrestrial and LEO Satellite Networks: A 6G Survey and Research Roadmap

Ainur Daurembekova, University of Kaiserslautern-Landau (RPTU); Hans Schotten, University of Kaiserslautern

63564

3 A Novel Isolation Topology for Inter-Satellite Link Architecture in LEO Mega-Constellation Networks

Ruiqi Su, National University of Defense Technology; Quan Chen, National university of defense technology; Chengguang Fan, Lizeng Gong, Wenlong Zhang, National University of Defense Technology; Lei Yang, National university of Defense Technology

88555

4 Distributed Routing Strategy Using Fuzzy-Logic for LEO Mega-Constellation Networks

Lizeng Gong, National University of Defense Technology; Quan Chen, National university of defense technology; Chengguang Fan, Wenlong Zhang, National University of Defense Technology

54901

5 Distributed Topology-Aware Fast Near-Shortest Path Routing for LEO Mega-Constellations
Wenlong Zhang, National University of Defense Technology; Quan Chen, National university of defense technology; Chengguang Fan, Lizeng Gong, National University of Defense Technology

71241

6 Fair Energy Efficient Semantic Communication for Satellite?Air?Ground Integrated Network
Yichen Wu, Jianxin Dai, Nanjing University of Posts and Telecommunications; Zhaohui Yang, Zhejiang University; Chen Zhu, Zhejiang Provincial Key Laboratory of Information Processing,; Zhaoyang Zhang, Zhejiang University

36789

7 Massive MIMO LEO Satellite Communications with FIMCC-Aided Pilot Reuse
Yuanshuo Wang, Li You, Huibin Zhou, Southeast University; Wei Wang, Xi?an Jiaotong University; Ke-Xin Li, Xidian University; Xiang-Gen Xia, University of Delaware; Xiqi Gao, Southeast University

20878

8 PT-KMS: A Polynomial Pool and Trust Chain-based Distributed Key Management Scheme for LEO Satellite Networks
lilongyu, Shuang Tian, Tao Zhang, Beijing Jiaotong University; Xiangyun Tang, Minzu University of China; Jiacheng Wang, Nanyang Technological University; Zhenghui Yuan, University of Warwick; Xuangou Wu, Anhui University of Technology; Jiawen Kang, Guangdong University of Technology; Geng Sun, Jilin University; Jiqiang Liu, Beijing Jiao Tong University, China

84206

9 Reduced-Basis Constrained Tree Search for Large-Scale MIMO Detection
Lanxin He, Zheng Wang, Southeast University; Jinming Wen, Jinan University; Yongming Huang, Southeast University

26199

10 The WMMSE Algorithm Based on BFGS Quasi-Newton Method in Massive MIMO Systems
Yuhuan Zhao, Bin Yan, Zheng Wang, Yongming Huang, Southeast University; Qingjiang Shi, Tongji University

W12 - Emerging Metaverse and 6G Massive/Immersive Communications (6G Metaverse) Papers

21249

1 Adaptive Fuzzy Logic-Driven Handover Framework for Ultra-Dense 6G Networks
Akzhibek Amirova, Laura Aldasheva, Astana IT University

68357

2 Bandwidth Limited Diffusion-Driven Semantic Communication
Zhengjia Xu, Aston University; zhuangkun wei, durham university; Hongjian Sun, Durham University; Julie A McCann, Imperial College London

89675

3 Data-Driven Path Loss Prediction for 28 GHz mmWave Communications in Dense 5G and Beyond Networks for Immersive Metaverse Services
Gulsaya Nurzhaubayeva, Astana IT University

30986

4 Multidimensional Resource Allocation for Proactive Immersive Communication with Feasible Learning
Xing Wei, Beihang University; Yue Wang, China Telecom Research Institute

71930

5 Multi-Sensory Attack Vectors in Immersive 6G Metaverse Environments: A STRIDE-Based Threat Categorization Attempt
Wiktor S?dkowski, Opole University of Technology

93228

6 Stability-Aware ATSSS for XR Hysteresis-Guided and DRL-Based Multi-RAT Control in 5G Wi-Fi Networks
Bharat Agarwal, Dublin City University

52833

7 A Semantic-Driven Communication Framework for Bandwidth-Limited Internet of Vehicles
Yingquan Zou, Yixiao Zhang, Jinfu Li, Southwest Jiaotong University; Chong Huang, University of Surrey; Xiaoxu Zhang, Southwest Jiaotong University; Donggen Li, Chongqing University; Pei Xiao, University of Surrey

36240

8 Joint Massive Access and Intelligent Trajectory Design for UAVs Communications Network under Low-Altitude Complex Airspace
Xiaoli Liu, Simeng Feng, Jingxiang Yuan, Yunyi Zhang, Kefeng Guo, Nanjing University of Aeronautics and Astronautics; Baolong Li, Nanjing University of Information Science and Technology; Qihui Wu, Nanjing University of Aeronautics and Astronautics

W13 - Fluid Antenna System (FAS) for 6G Papers

35177

1 Fluid Antenna System Combining Metasurfaces and Beamforming Antennas for Two by Two LOS-MIMO Mobile Communication Systems
Dan Mohri, NTT DOCOMO, Inc.; Keisuke Sato, Takayoshi Sasaki, Yoshiki Shirasawa, DKK Co, Ltd.; Satoshi Suyama, NTT DOCOMO, INC.; Daisuke Murayama, NTT Access Network Service Systems Laboratories; Shoko Shinohara, Takeru Fukushima, NTT, INC.; Yuyuan CHANG, NTT DOCOMO, INC.; Huiling Jiang, NTT DOCOMO, INC

42207

2 Energy Efficient Wireless Agent Networks (WAN) With Fluid Antenna System
Yiting Wang, Jianxin Dai, Nanjing University of Posts and Telecommunications; Zhaohui Yang, Zhejiang University; Chen Zhu, Zhejiang Provincial Key Laboratory of Information Processing,; Zhouxiang Zhao, Siyun Liang, Zhejiang University; Yang Sun, he CRSC Research Design Institute Group Co.,Ltd.,

W14 - IEEE VTC-Spring 2026: The 3rd Workshop on Synergizing Digital Twins and Pervasive Intelligence Papers

13276

1 UAV-Assisted Anti-Jamming Relay Design for Reliable Federated Learning in Mobile Networks
Tongzhou Yang, College of Communication Engineering, Jilin University; Qihao Li, Jilin University; HUI LIANG, Dongguan University of Technology; Xianhua Yu, Macau University of Science and Technology; Fengye Hu, College of Communication Engineering, Jilin University; Jixiang Wang, Jilin University

36116

2 A Digital Twin-Driven Intelligent Anti-Drone Platform with mmWave Phased Array Radar
Haoming Li, HUI LIANG, Yuzhou Xie, Yuzhou Chen, Zhihui Wu, Xianglong Wu, Xueqian Fang, Dongguan University of Technology

36911

3 Chansformer: A Lightweight Network for Robust OFDM Channel Estimation
Shirong Tu, Zimeng He, Qi Yang, Xiamen University

24842

4 Joint Optimization of Latency and Freshness for Digital Twin-Empowered Vehicular Edge Services
Hao XIONG, The Hong Kong University of Science and Technology(Guangzhou); Dr. Jiadong Yu, The Hong Kong University of Science and Technology (Guangzhou)

29801

5 PRISM: Physics-Radio Integrated Simulation and Management for V2X Digital Twins
Chia-Chuan Chiu, Ming-Chun Lee, National Yang Ming Chiao Tung University; Yung-Sheng Chao, National Chiao Tung University; Li-Chun Wang, National Yang Ming Chiao Tung University

24554

6 Simultaneous Fare Authentication for Public Transit
Aybüke Hac?hasano?lu-?anl?me?hur, Istanbul Technical University; Hanife Kübra Kaya, I??k University; Enver Ozdemir, Istanbul Technical University

W15 - Intelligent Synergy of Sensing and Communications for Green IoT Papers

59976

1 Enhancing Real-Time Fall Detection on IoT Edge Devices via Bayesian Calibration of Fused MEMS Inertial Sensors and Temporal Convolutional Networks
Siyuang Liang, Tong Yang, Jiahuan Fan, Xi'an University of Posts and Telecommunications; Yongxing Zheng, Xi'an Hackbutter Intelligent Technology Co., Ltd.

53457

2 Multi-priority Traffic Delay Analysis for Edge Intelligence in Industrial Internet of Things
Song Li, Jie Li, Ruirui Chen, China University of Mining and Technology; Yajie Pang, Hainan College of Economics and Business; Peng Xu, Jiangsu Automation Research Institute

96977

3 Online Integrated Sensing-Computation-Communication Optimization for Emergency UAV Networks
ZHAGN CHI, China Telecom Research Institute

21756

4 Proactive Interval-aware Latency Monitoring and Anomaly Detection for IoT Networks Using SDN/P4
Bong-Hwan Oh, Xi?an Jiaotong-Liverpool University

38968

5 A Virtual-Real Digital Twin Fusion Routing Algorithm for Robust Data Transmission in 6G SAGINs
Lipei Sun, Nanjing University of Posts and Telecommunications; Hui, Zhang; Yuanji Shi, Zhongke Nanjing Mobile Communication & Computing Innovation Institute; Chunlin Chen, Wenshuo Huang, Nanjing University of Posts and Telecommunications

36905

6 Deep Reinforcement Learning for Accurate Sensing in NOMA-aided ISAC Systems
Yuling Liu, Feng Ke, South China University of Technology; Guobin Zhang, Dongguan University of Technology; Tham Mau Luen, Universiti Tunku Abdul Rahman; Xiuyin Zhang, South China University of Technology

91211

7 Energy-Efficient AUV-Assisted Data Collection and Resource Allocation for MI-Based UWSNs in Obstacle Environments
Ting Li, FuZhou University; Yisheng Zhao, Fuzhou University; Changkun Wu, Tao Zhang, Shen Zhang, FuZhou University

71748

8 Error-Resilient Semantic Communication for Point Cloud Transmission over Packet-Loss Networks
Shouye Lyu, Jincheng Dai, Beijing University of Posts and Telecommunications; Haotong Cao, Nanjing University of Posts and Telecommincations; Sixian Wang, Shanghai Jiao Tong University; Wenjun Xu, Beijing University of Posts and Communications; Ping Zhang, Beijing University of Posts and Telecommunications

74756

9 FLAG-IDS: A Federated Lightweight Attentive Granularity Intrusion Detection System for Low-Probability Attacks in IoV
Xuhui Huang, Chang Liu, Zheng Xue, Guangdong University of Technology; Bintao Hu, Xi'an Jiaotong-Liverpool University; Lei Xu, China Mobile Communications Group Jilin Co., Ltd; Muhammad Umar Farooq Qaisar, Hangzhou International Innovation Institute of Beihang University; Guojun Han, Guangdong University of Technology

98162

10 Joint Beamforming Optimization and Dynamic Tracking in RIS-Enabled Secure ISAC Systems
Weichun Zhao, Zhendong Li, Xi'an Jiaotong University; Zhou Su, Shanghai University, China; Yan Yang, Rocket Force University of Engineering; Xiaoyan Hu, Xi'an Jiaotong University; Jiakang Zheng, Beijing Jiaotong University; Wen Chen, Dept. of Electronic Engineering, Shanghai Jiao Tong Univ.

51345

11 Joint DOA Estimation and Communication: Nonlinear-Resilient CE-OFDM for ISAC Systems
Yijia Cheng, Beijing Institute of Technology; JIANGUO LI, Beijing Institute of technology; Bizheng Liang, China Academy of Space Technology; Peng Wang, Xuhui Ding, Xiangyuan Bu, Kai Yang, Beijing Institute of Technology

76228

12 Scene-Aware Hierarchical Fusion Positioning Method for 6G Passive IoT
Renming Wang, Nanjing University of Posts and Telecommunications; Hui, Zhang; Yuanji Shi, Zhongke Nanjing Mobile Communication & Computing Innovation Institute; Chunlin Chen, Wenshuo Huang, Nanjing University of Posts and Telecommunications

59061

13 Semantic-Aware Quantum Wireless Sensing System with Rydberg Atomic Receivers
Jiaqi Liu, Jianxin Dai, Nanjing University of Posts and Telecommunications; Zhaohui Yang, Zhejiang University; Chen Zhu, Zhejiang Provincial Key Laboratory of Information Processing,; Zhaoyang Zhang, Zhejiang University; Yang Sun, he CRSC Research Design Institute Group Co.,Ltd.,

64727

14 Semantic Importance-Oriented NB-PC High-Reliability Transmission Scheme
Baoxin Su, Shufeng Li, Junwei Zhang, Long Pang, Communication University of China

16806

15 VulnHunter: A Lightweight Automated Framework for Systematic XSS Vulnerability Discovery
Baiquan Wang, Bin Hu, Jice Wang, Fannv He, Hainan University

W16 - LPWAN-Based Terrestrial-Non-Terrestrial Integration for Vehicular Networks: AI-Driven Hardware Papers

14633

1 Empowering AI Towards 6G: Realistic UAV Channel Data Acquisition Using Open-Source Solutions
Qiuheng Zhou, Sergiy Melnyk, German Research Center for Artificial Intelligence; Hans Schotten, University of Kaiserslautern; Robert Vilter, Nick Stuckert, Technical University of Applied Sciences Wildau

54223

2 Enhancing Learning Stability in Multi-Slice 6G O-RAN Resource Management Using Dueling Double Deep Reinforcement Learning
Amandeep Kaur, Sujal Gupta, ABV Indian Insitute of Information Technology and Management Gwalior

43861

3 Fairness-Enhanced Multi-Hop RIS-Assisted UAV Networks With NOMA-Based Power Allocation
Rohan R. Devarapalli, Nancy Varshney, BITS Pilani Hyderabad Campus, India; Nikumani Choudhury, Birla Institute of Technology and Sciences, Pilani, Hyderabad Campus; Syed Mohammad Zafaruddin, BITS Pilani; Aryan Kaushik, Indraprastha Institute of Information Technology Delhi, India; Tamoghna Ojha, Indian Institute of Technology (ISM), Dhanbad, Jharkhand, India

76231

4 Footprint-Aware Security and Privacy Profiles for Connected Mobility over Hybrid Terrestrial-Non-Terrestrial Networks
Muhammad Asghar Khan, Prince Mohammad Bin Fahd University

90000

5 Resilient Vehicular SLAM via NTN-Enabled Collaborative Loop Closure in 6G Networks
Azam Rafique Memon, Prince Sultan University; Muddesar Iqbal, Dhafer Almakhles, Prince Sultan University, Riyadh, Saudi Arabia

19612

6 Wide Band MIMO Antenna Array for Vehicular Communications: Design and Performance Assessment
Haleem Farman, Prince Sultan university, KSA

61093

7 Spectrum Sharing and Interference Analysis for HAPS-Terrestrial Network Coexistence
Xinyuan Cao, Ye Neng, Sirui Miao, Beijing Institute of Technology; Juan Liu, DOCOMO Beijing Communication Laboratories Co., Ltd.; Wenjia LIU, DOCOMO Beijing Labs; Xiaolin Hou, DOCOMO Beijing Communications Laboratories Co., Ltd

W17 - Near-Field Communications, Localization, and Sensing for 6G and Beyond Papers

84658

1 Energy Efficiency Optimization for Near-Field Semantic Communication Systems
Qimei Chen, Jianxin Dai, Nanjing University of Posts and Telecommunications; Zhaohui Yang, Zhejiang University

12500

2 Fast and Accurate Channel Estimation in IRS-assisted XL-MIMO Communication Networks
Gopal Chamarthi, Indian Institute of Technology Mandi; Dr. Adarsh Patel, SCEE, Indian Institute of Technology Mandi, HP; Rameshwar Pratap, Indian Institute of Technology Hyderabad

46920

3 Predictive Analog Combining Assisted Near-Field Position and Orientation Tracking
Lin Chen, The Chinese University of Hong Kong; Xiaojun Yuan, UESTC - China; Yingjun Zhang, Chinese University of Hong Kong

48359

4 UAV SAR Imaging with 5G NR OFDM Signals in NLOS Environments
Qiuyuan Yang, Cunhua Pan, Southeast University; Ruidong Li, Shandong Yunhai Guochuang Innovative Technology Co., Ltd; Zhenkun Zhang, Hong Ren, Southeast University; Changhong Wang, Jinan Maiwei Intelligent Technology Co., Ltd; Jiangzhou Wang, Southeast University

W18 - Next-Generation Movable and Reconfigurable Antennas for Wireless Networks Papers

19466

1 Nesterov-Optimised Subgrouping for Many-to-Many Multicast D2D Networks Assisted by Reconfigurable Intelligent Surfaces
Adrija Bhaduri, NIT Silchar; Dr. Ranjay Hazra, Devendra Singh Gurjar, National Institute of Technology Silchar; Ekant Sharma, IIT Roorkee

41416

2 Rotating ULA-enabled Computed Tomography for Efficient 3D Spatial Power Spectrum Synthesis via Analog Receive Combining
Haocheng Hua, The Chinese University of Hong Kong (Shenzhen); Weidong Mei, UESTC; Jie Xu, The Chinese University of Hong Kong, Shenzhen; Rui Zhang, National University of Singapore

78549

3 Coupler Position Optimization for Flexible Coupler Array Aided Low-Altitude Wireless Networks
Xiaodan Shao, University of Waterloo; Chuangye Shan, Shell (Beijing) New Energy Technology Co., Ltd., China; Zhiyuan Zhai, Fudan University, China; Rupei Xu, The University of Texas at Dallas; Yunli Li, The Chinese University of Hong Kong, Shenzhen; Derrick Wing Kwan Ng, University of New South Wales

91697

4 Flexible Coupler Enhanced Wireless Communication via Coupler Position Optimization
Xiaodan Shao, University of Waterloo; Chuangye Shan, Shell (Beijing) New Energy Technology Co., Ltd., China; Yunlong Du, University of Electronic Science and Technology of China, China.; Rui Zhang, National University of Singapore

13993

5 Cellular-Connected UAV Communications Enhanced by Movable Antennas and Trajectory Design
Tianshi Ren, Beijing Institute of Technology; Xianchao Zhang, Jiaxing University; Wenyan Ma, National University of Singapore; Lipeng Zhu, Xiaozheng Gao, Beijing Institute of Technology; Rui Zhang, National University of Singapore

77667

6 ISAC Using Continuous-Aperture Arrays over Fading Communication Channels
Boqun Zhao, University of Alberta; Chongjun Ouyang, Queen Mary University of London; Xingqi Zhang, University of Alberta

41179

7 Joint Placement and Beamforming Optimization for Movable Antenna-Enhanced Multi-User Multi-Target ISAC System
Dekai Zhao, Junling Li, Shiyu Xi, Shiyu Xiao, Cheng-Xiang Wang, Southeast University

29836

8 Movable Antenna Enabled Multi-Target Sensing: Performance Analysis and Optimization
Haobin Mao, Beihang University; Lipeng Zhu, Beijing Institute of Technology; Wenyan Ma, National University of Singapore; Zhenyu Xiao, Beihang University

53281

9 RIS-Aided Secure Downlink Transmission for Integrated Sensing, Energy, and Communication Systems
Yichen Wu, Jianxin Dai, Cunzhen Liu, Linqing Gui, Nanjing University of Posts and Telecommunications

49073

10 Two-Timescale Optimization for MA-Aided Multiuser Communications Under Two-Wave with Diffuse Power Model
Songqi Cao, Beihang University; Lipeng Zhu, Beijing Institute of Technology; Zhenyu Xiao, Haobin Mao, Zipeng Yang, Beihang University

W19 - Workshop on 5G&Beyond for Railways Challenges and Opportunities for Operational and Passen Papers

62692

1 5G for Railways Over Leaky Coaxial Cables: Experimental Validation on an FRMCS Testbed
Hefdhallah Sakran, Chemnitz University of Technology; Shahab Ehsanfar, Technische Universität Chemnitz; Charbel Lahoud, Technische Universit¨at Chemnitz; Klaus Moessner, Technical University Chemnitz

42537

2 A comprehensive evaluation on Operational connectivity for Future railways communications
David KULE MUKUHI, LIGM, Université Gustave Eiffel; Léo Mendiboure, Université Gustave Eiffel; Rami Langar, LIGM-CNRS, UPEM; Sylvain cherrier, université gustave eifffel; Marion Berbineau, Université Gustave Eiffel; Pierre Petton, SNCF; rodrigue Fargeon, SNCF-Réseau

37938

3 Channel Measurements in a Railway Environment for 5G-Based FRMCS Deployment
Frédéric Munoz, CEA-Leti; Kai Mao, Université Gustave Eiffel; Raffaele Derrico, CEA-LETI; Chadli Hadji, Université Gustave Eiffel; Gilles Boistault, SNCF-Réseau; Marion Berbineau, Université Gustave Eiffel

60632

4 Cooperative Localization of Trains with Magnetic Field Measurements and Radio-based Ranging
Benedikt Merk, German Aerospace Center (DLR); Benjamin Siebler, DLR (German Aerospace Center); Paul Unterhuber, Andreas Lehner, Stephan Sand, German Aerospace Center (DLR)

89410

5 Evaluating Edge Computing Deployment Options in Hybrid 5G?LEO Railway Communication Systems
Léo Mendiboure, Mohamed Coulibaly, Université Gustave Eiffel; David KULE MUKUHI, LIGM, Université Gustave Eiffel; Romain Dulout, Université Gustave Eiffel

71812

6 Low Earth Orbit Satellites and 5G Data Acquisition for Railway Applications
Wael CHERIF, Christophe Vitry, Veli Alperen SEZER, Hitachi Rail; Nerea Fernández Berrueta, CEIT; Pierre Le Corre, SNCF

17927

7 Queue-Aware Deep Reinforcement Learning for Joint Beam and Power Control in mmWave FRMCS
Mohammad Javadi, Shahab Ehsanfar, Technische Universität Chemnitz; Klaus Moessner, Technical University Chemnitz

10693

8 Ray-tracing modelling and experimental evaluation of railway rural propagation channel
Thierry Tenoux, Siradel; Yoann CORRE, SIRADEL; Patrice Pajusco, IMT Atlantique; Ahmed Abdelghany, Jamaleddine Amghar, IMT-Atlantique, Lab-STICC UMRS 6285

27049

9 Train-to-Train Short Range Communication and Relative Localization based on IEEE802.15.4
Paul Unterhuber, Martin Schmidhammer, Christian Gentner, Benedikt Merk, German Aerospace Center (DLR); Benjamin Siebler, DLR (German Aerospace Center); Andreas Lehner, Fabian de Ponte Müller, German Aerospace Center (DLR); Ibrahim Rashdan, German Aerospace Center; Dominik Egginger, German Aerospace Center (DLR)

99176

10 Experimental Evaluation of Multipath TQUIC for Mission-Critical Communications
Pedram Delavari, Technische Universität Chemnitz, Germany; Shahab Ehsanfar, Reza Moheimani, Technische Universität Chemnitz; Klaus Moessner, Technical University Chemnitz

26292

11 RAT Switching Strategies and Link Recovery in a Three-Layer Pods4Rail Architecture

Dereje Mechal Molla, Gustave Eiffel University; Léo Mendiboure, Université Gustave Eiffel; Sassi Maaloul, Université de technologie de Belfort Montbéliard; Dingyang Liu, Gustave Eiffel University; Marion Berbineau, Université Gustave Eiffel

78252

12 5G-R Channel Characterization based on Measurement-calibrated Ray Tracing at 2.16 GHz for Inside-Station and Viaduct Scenarios

Shan Luo, Beijing Jiaotong University; Danping He, Beijing Institute of Technology; Lei Yang, Beijing jiaotong University; Jing Cao, Beijing Jiaotong University; Yueyao Liu, CRSC Research & Design Institute Group Co., Ltd.; Lei Han, China Railway Beijing Group Co.; Tingting Gao, CRSC Research & Design Institute Group Co., Ltd.; Ke Guan, Beijing Jiaotong University

71898

13 Adaptive Handover Optimization in High-Speed Rail Using Proximal Policy Optimization

Xinhan Feng, Southwest jiaotong university; Yue Xiao, Southwest Jiaotong University; Heng Liu, Key Lab of Information Coding and Transmission; Liu Yang, Southwest Jiaotong University; Wei Chen, Beijing Jiaotong University; Zheng Ma, Southwest Jiaotong University

56920

14 Effect of Statistical Building Features on Railway Channels: Large-Scale Fading Characterizations

Qingchi Qin, Nanjing University of Aeronautics and Astronautics; Kai Mao, Marion Berbineau, Université Gustave Eiffel; Mingqi Guo, Qiuming Zhu, Nanjing University of Aeronautics and Astronautics

98775

15 Measurement-Based Assessment of FRMCS Downlink Coexistence with 5G Band 1 Uplink

Michael Meiseneder, Vienna University of Technology; Herbert Koblmiller, A1 Telekom Austria AG; Philipp Svoboda, TU Wien

59998

16 Physics-Aware Ka-band Satellite Channel Prediction for Remote Railway Communications

Haobo Zhang, Beijing Jiaotong University; Chen Chen, National Key Laboratory of High-Speed Maglev Vehicle Technology; Dan Fei, LiuLiu, Bo Ai, Beijing Jiaotong University

W20 - Workshop on Communication-Computing Co-Design for Energy-Efficient 6G Cloud-Edge Intelligence Papers

63519

1 Cross-attention Empowered Personalization Federated Learning with Diagnosis Knowledge Distillation

Haokai Yang, Xiaolan Liu, University of Bristol; Hui Zhou, Coventry University

46842

2 ?Computing for Mechanics?: Cross-Scale Joint Spatial-Semantic Optimization for 6G FAS-Enabled Embodied Agents

Fangyue Shan, Jianxin Dai, Nanjing University of Posts and Telecommunications; Zhaohui Yang, Zhejiang University; Chen Zhu, Zhejiang Provincial Key Laboratory of Information Processing,; Zhouxiang Zhao, Siyun Liang, Zhejiang University; Yang Sun, he CRSC Research Design Institute Group Co.,Ltd.,

31938

3 Dual-Timescale Position Optimization and User Association for Movable-Antenna HetNets

Zongyuan Deng, Tianjun Wu, Bin Lyu, Nanjing University of Posts and Telecommunications; Yan Liu, Tongji University; Arumugam Nallanathan, Queen Mary University of London

30482

4 Heterogeneous Multi-Agent Logistics Scheduling Under a Cloud-Edge Collaboration Architecture

Haorong Guo, Ming Yan, Ling Lei, Communication University of China; Chunguo Li, Southeast University, Nanjing, China

98417

5 Multi-Agent Orchestration of Vision-Language Model for Critical Event Detection

Ebenezer Acquah, Abdul-Qudus Fikewa Olatunji, Prairie View A&M University; Iris Qian, The University of Texas at Austin; Zhu Han, University of Houston; Daniel Mawunyo Doe, Prairie View A&M University

64004

6 Pilot-Free Data Detection using a Coherent-MAC based Unified Network Coordinator in IoT HetNets

Sk Md Shafique Anwar, Indian Institute of Technology, Mandi; Dr. Adarsh Patel, SCEE, Indian Institute of Technology Mandi, HP

73809

7 Resource Allocation Strategy for MEC-Assisted UWSN in Sea Wave Environments

Changkun Wu, FuZhou University; Yisheng Zhao, Fuzhou University; Ting Li, Shen Zhang, Tao Zhang, FuZhou University

W21 - Workshop on Mission Critical and Emergency Communications Papers

49923

1 Efficient and Reliable Adaptive Packet Replication for Vehicular MPQUIC

Takuma Tsubaki, NTT, Inc.; Seiya Komatsu, NTT; Takashi Torii, Soto Anno, NTT, Inc.; Takuya Tojo, NTT Network Service Systems Laboratories

31304

2 Position Optimization of Multi-UAV Relaying Systems for Emergency Lossy Communications

Ya Lian, Zixuan Qin, Dongwei Zhao, Wensheng Lin, Lixin Li, Wei Liang, Northwestern Polytechnical University

14226

3 Reliability Evaluation of 5G NR-V2X Sidelink Communication During Platoon Encountering in Urban Environments

Kosuke Sanada, Kazuo Mori, Mie University; Manabu Mikami, SoftBank Corp.

81783

4 A Traffic-Aware Conditional Handover Scheme for Emergency Communication in Large-Scale LEO Satellite Networks

Qianyao Li, Xi'an Jiaotong University; Tang Zhihua, Shanghai Satellite Network Research Institute Co., Ltd; Yichen Wang, Tao Wang, Peixuan Li, Xi'an Jiaotong University; Lingxiao Jiao, Shanghai Satellite Network Research Institute Co., Ltd.; Yueyue Zhang, State Key Lab.

Sat. Netw., Shangh, Shanghai Sat. Netw. Res. Inst.; Zhang Fang, Shanghai Satellite Network Research Institute Co. Ltd

46360

5 Effective Capacity Analysis for SAGIN-Enabled Emergency Communications
Yinong Chen, Wenchi Cheng, Xidian University

20958

6 FPGA-Based Sampling Clock Impairments Emulator for Robustness Testing in Wide-band Emergency Communications
Weishi Li, Yu Mao, University of Electronic Science and Technology of China; Qiang Xu, UESTC; Youxi Tang, University of Electronic Science and Technology of China

73191

7 Frequency Selection for Massive MIMO HF Skywave Systems for Emergency Communications
Huibin Zhou, Li You, Hanzhi Gu, Southeast University; Xiang-Gen Xia, University of Delaware; Xiqi Gao, Southeast University

61100

8 Gravity-Inspired Causal Link Prediction for Reliability Enhancement in Emergency Wireless Networks
Yiting Yang, Yongming Huang, Southeast University; Shiwen He, Central South University; Hang Zhan, Purple Mountain Laboratories; Siyi Chen, Realsil Microelectronics (Suzhou) Co., Ltd.; Zeyu Tan, Southeast University

79151

9 Residual-Energy-Driven SQRD Towards Low-Complexity Sphere Decoding in Emergency MIMO Communications
Yuhao Zhang, Qinghe Du, Shijiao Zhang, Xi'an Jiaotong University

42106

10 Testbed-Driven Evaluation of Mission Critical Resilience for Remote Patient Monitoring Systems
Vikas Tomer, Sachin Sharma, Mark Davis, Technological University Dublin

W23 - Distributed LLMs at the Edge: Communication, Computation, and Mobility Constraints Papers

98589

1 SWARM-LLM: Collaborative Inference for Edge-based Small Language Models
Mostafa Dahshan, Quazi Mamun, Tanmoy Debnath, Charles Sturt University

90654

2 Distributed Training of Transformer-based Large Model in Wireless Networks via Tensor Parallelism
Jiayang Xie, Yuchuan Ye, Fuzhou University; Youjia Chen, FZU; Ming Ding, Data61; Peng Cheng, La Trobe University; Dusit Niyato, Nanyang Technological University

36140

3 LLM-Driven Design for QoS Prediction in Non-Terrestrial Networks
Yi-Chieh Chao, Hong-Ruei Lin, Yu-Hsuan Su, Shao-Yu Lien, National Yang Ming Chiao Tung University; Kentaro Ishizu, NICT

W24 - Open and Programmable Research Infrastructures and Software for AI-Native 6G (OPERA-6G) Papers

15883

1 From Spoofing to Trust: Emergency Alerts Spoofing Testbed and Cross-Cell Verification
Abdallah Abou Hasna, KAUST; Nada Chendeb, Lebanese University; Ammar El Falou, King Abdullah University of Science and Technology (KAUST)