

IEEE

VTS

Connecting the Mobile World

2023

Awards Program

Gordon Stüber,
Chair, VTS Awards Committee

AWARDS

THE VEHICULAR TECHNOLOGY CONFERENCE AWARD

For exemplary contributions to the success of the
2023 IEEE 98th Vehicular Technology Conference, VTC2023-Fall.

General Chairs

Khaled B. Letaief, Song Guo

VEHICULAR TECHNOLOGY CONFERENCE 2023 FALL BEST PAPER AWARDS

BEST VTC2023-FALL PAPERS - REGULAR

Federated Learning based Vehicular Threat Sharing: A Multi-Dimensional Contract Incentive Approach

Chao He, Tom H. Luan, Dr. Nan Cheng, Xidian University, China | **Guiyi Wei**, Zhejiang Gongshang University, China | **Zhou Su**, Shanghai University | **Yiliang Liu**, Xi'an Jiaotong University, China

BEST VTC2023-FALL PAPERS - STUDENT

DDPG-based Multi-AP Cooperative Access Control in Dense Wi-Fi Networks

Huanrong Zhang, Rong He, Xuming Fang, Lihong Zhou, Southwest Jiaotong University, China

VEHICUR TECHNOLOGY SOCIETY BEST PAPERS AWARDS

2023 JACK NEUBAUER MEMORIAL AWARD

Recognizes the best systems paper published in the IEEE Transactions on Vehicular Technology

Yu Han, Wankai Tang, Shi Jin, Chao-Kai Wen and Xiaoli Ma

for the paper entitled, Large Intelligent Surface-Assisted Wireless Communication Exploiting Statistical CSI, IEEE Transactions on Vehicular Technology, Vol. 68, No. 8, pp. 8238–8242, August 2019

2023 BEST LAND TRANSPORTATION PAPER AWARD

Recognizes the best paper on land transportation published in the IEEE Transactions on Vehicular Technology

Xiaoyuan Liang, Xunsheng Du, Guiling Wang and Zhu Han

for the paper entitled, A Deep Reinforcement Learning Network for Traffic Light Cycle Control, IEEE Transactions on Vehicular Technology, Vol. 68, No. 2, pp. 1243–1253, February 2019

2023 NEAL SHEPHERD MEMORIAL BEST PROPAGATION AWARD

Recognizes the best propagation paper published in the IEEE Transactions on Vehicular Technology

Shu Sun, Theodore S. Rappaport, Mansoor Shafi, Pan Tang, Jianhua Zhang and Peter J. Smith

for the paper entitled, Propagation Models and Performance Evaluation for 5G Millimeter-Wave Bands, IEEE Transactions on Vehicular Technology, Vol. 67, No. 9, pp. 8422–8439, September 2018

2023 BEST VEHICULAR ELECTRONICS PAPER AWARD

Recognizes the best paper on vehicular electronics published in the IEEE Transactions on Vehicular Technology

Xiaosong Hu, Hao Yuan, Changfu Zou, Zhe Li and Lei Zhang

for the paper entitled, Co-Estimation of State of Charge and State of Health for Lithium-Ion Batteries Based on Fractional-Order Calculus, IEEE Transactions on Vehicular Technology, Vol. 67, No. 11, pp. 10319–10329, November 2018

AWARDS

2023 BEST MAGAZINE PAPER AWARD

Recognizes the best magazine paper published in the IEEE Vehicular Technology Magazine

Zhengquan Zhang, Yue Xiao, Zheng Ma, Ming Xiao, Zhiguo Ding, Xianfu Lei, George K. Karagiannidis and Pingzhi Fan

for the paper entitled, 6G Wireless Networks: Vision, Requirements, Architecture, and Key Technologies, IEEE Vehicular Technology Magazine, Vol. 14, No. 3, pp. 28-41, September 2019

2023 OJVT BEST PAPER AWARD

Recognizes the best paper published in the IEEE Open Journal of Vehicular Technology

Ying Loong Lee, Donghong Qin, Li-Chun Wang and Gek Hong Sim

for the paper entitled, IEEE Open Journal on Vehicular Technology, IEEE Open Journal Veh. Techn., Vol. 2, pp. 54-66, December 2020

AWARDS RECOGNIZING THE ACCOMPLISHMENTS OF GROUPS

VTS CHAPTER OF THE YEAR AWARD

Recognizes the outstanding Vehicular Technology Society Chapter

Malaysia Section Joint Chapter

Chapter Chair

Mohamad Yusoff bin Alias

Multimedia University, Malaysia

SIGNIFICANT INDIVIDUAL ACCOMPLISHMENT AWARDS

2023 JAMES EVANS AVANT GARDE AWARD



Marco Di Renzo

Professor, Centre National de la Recherche Scientifique, France

for outstanding contributions to the theoretical foundation and technology development of mobile radio communications, notably spatial/index modulation, stochastic geometry, and reconfigurable metasurfaces (RIS)

Marco Di Renzo (Fellow, IEEE) received the Laurea (cum laude) and Ph.D. degrees in electrical engineering from the University of L'Aquila, Italy, in 2003 and 2007, respectively, and the Habilitation à Diriger des Recherches (Doctor of Science) degree from the University Paris-Sud (now Paris-Saclay University), France, in 2013. Since 2010, he has been with the French National Center for Scientific Research (CNRS), where he is currently a CNRS Research Director (Professor) with the Laboratory of Signals and Systems (L2S), Paris-Saclay University, CNRS and CentraleSupélec, Paris, France. In Paris-Saclay University, he serves as the Coordinator for the Communications and Networks Research Area of the Laboratory of Excellence DigiCosme, and as a member of the Admission and Evaluation Committee of the Ph.D. School on Information and Communication Technologies. He is a fellow of the U.K. Institution of Engineering and Technology (IET), a fellow of the Asia-Pacific Artificial Intelligence Association (AAIA), an Ordinary Member of the European Academy of Sciences and Arts (EASA), and an Ordinary Member of the Academia Europaea (AE). He has received several research distinctions, which include the SEE-IEEE Alain Glavieux Award, the IEEE Jack Neubauer Memorial Best Systems Paper Award, the Royal Academy of Engineering Distinguished Visiting Fellowship, the Nokia Foundation Visiting Professorship, the Fulbright Fellowship, and the 2021 EURASIP Journal on Wireless Communications and Networking Best Paper Award. He is the Editor-in-Chief of the IEEE COMMUNICATIONS LETTERS and a Distinguished Speaker of the IEEE Vehicular Technology Society. From 2017 to 2020, he was a Distinguished Lecturer of the IEEE Vehicular Technology Society and the IEEE Communications Society. He is also a Highly Cited Researcher.

SIGNIFICANT INDIVIDUAL ACCOMPLISHMENT AWARDS

2023 EARLY CAREER AWARD



Shu Sun

Associate Professor, Shanghai Jiao Tong University, Shanghai, China

for fundamental contributions to the development of 5G millimeter-wave communications

Shu Sun (Member, IEEE) received the B.S. degree in applied physics from Shanghai Jiao Tong University (SJTU), Shanghai, China, in 2012, and the Ph.D. degree in electrical engineering from New York University, New York City, NY, USA, in 2018. She was a Systems Engineer with Intel Corporation, Santa Clara, CA, USA, from 2018 to 2021. She is currently a tenure-track Associate Professor with SJTU. She received the 2015 IEEE Donald G. Fink Award, the IEEE VTC2016–Spring Best Paper Award, the 2017 IEEE Neil Shepherd Memorial Best Propagation Paper Award, and the 2017 Marconi Society Young Scholar Award. She serves as a Guest Editor for IEEE JOURNAL ON SELECTED AREAS IN COMMUNICATIONS and an Associate Editor for IEEE OPEN JOURNAL OF ANTENNAS AND PROPAGATION and was a Guest Editor for Sensors.

2023 WOMEN'S DISTINGUISHED CAREER AWARD



Sumei Sun

Acting Executive Director, Institute for Infocomm Research, Agency for Science, Technology, and Research (A*STAR), Singapore

for outstanding contributions to wireless communications, and the wireless community

Sumei Sun (Fellow, IEEE) is currently a Principal Scientist, the Acting Executive Director (Research), and the Head of the Communications and Networks Department, Institute for Infocomm Research, Singapore. She is also holding a joint appointment with the Singapore Institute of Technology, Singapore, and an adjunct appointment with the National University of Singapore, Singapore, both as a Full Professor. Her research interests include next generation wireless communications, cognitive communications and networks, and industrial Internet of Things. She is the Editor-in-Chief of IEEE OPEN JOURNAL OF VEHICULAR TECHNOLOGY, a Member of IEEE TRANSACTIONS ON WIRELESS COMMUNICATIONS Steering | Committee, and a Distinguished Speaker of the IEEE Vehicular Technology Society 2018–2024. She is also the Director of the IEEE Communications Society Asia Pacific Board and a Member at Large with the IEEE Communications Society.

2023 STUART F. MEYER MEMORIAL AWARD



Nei Kato

Professor and Dean, Tohoku University, Japan

for contributions to the analysis and design of wireless communication systems and for exemplary service in the IEEE Vehicular Technology Society

Nei Kato (Fellow, IEEE) is a full professor and the Dean with Graduate School of Information Sciences (GSIS) and was the Director (2015-2019) of Research Organization of Electrical Communication (ROEC) and the Strategic Adviser (2013) to the President, Tohoku University. He has been engaged in research on computer networking, wireless mobile communications, satellite communications, ad hoc & sensor & mesh networks, UAV networks, smart grid, AI, IoT, Big Data, and pattern recognition. He has published more than 400 papers in prestigious peer-reviewed journals and conferences. He is the Vice-President (Member & Global Activities) of IEEE Communications Society (2018-2021), the Editor-in-Chief of IEEE Transactions on Vehicular Technology (2017-2021), and the Chair of IEEE Communications Society Sendai Chapter. He served as the Editor-in-Chief of IEEE Network Magazine (2015-2017), a Member-at-Large on the Board of Governors, IEEE Communications Society (2014-2016), a Vice Chair of Fellow Committee of IEEE Computer Society (2016), and a member of IEEE Communications Society Award Committee (2015-2017). He has also served as the Chair of Satellite and Space Communications Technical Committee (2010-2012) and Ad Hoc & Sensor Networks Technical Committee (2014-2015) of IEEE Communications Society. He is a Distinguished Lecturer of IEEE Communications Society and Vehicular Technology Society. He is a fellow of The Engineering Academy of Japan, Fellow of IEEE, and Fellow of IEICE.

FELLOWSHIP

DANIEL E. NOBLE FELLOWSHIP AWARD

To promote graduate-level study in Vehicular Technology

Zhaolin Wang

Queen Mary University of London, UK



for outstanding research contributions to integrated sensing and communications in intelligent vehicular networks

FELLOWSHIP

IEEE TRANSPORTATION ELECTRONICS FELLOWSHIP

To promote graduate-level study in Transportation Electronics Technology



Handi Chen

The University of Hong Kong

for outstanding research contributions to intelligent and connected transportation systems.

FELLOW RECOGNITION

VTS CLASS OF 2023 IEEE FELLOWS

Bilal Akin

for contributions to control, diagnosis and condition monitoring of AC drives

Symeon Chatzinotas

for contributions to precoding technologies for multiple antennas

Hong Chen

for contributions to predictive control and applications in automotive systems

Julian Cheng

for contributions to mathematical modeling of wireless systems and energy-efficient resource management of wireless networks

Jinho Choi

for contributions to multiple access signal processing systems

Jong-Moon Chung

for contributions in consumer wireless communications and networking systems technology

Song Ci

for contributions to reconfigurable electric vehicle batteries

Harpreet Dhillon

for contributions to heterogeneous cellular networks

Uma Jha

for advancements in multi-standard and multi-function wireless communication system design

Hai Jiang

for contributions to cognitive radio networking and wireless performance analysis

Zhigang Liu

for contributions to fault detection and protection in high-speed railway power systems

Hideki Ochiai

for contributions to power and spectral efficient wireless communication

Jianping Pan

for contributions to topology control of wireless networks

Yihong Qi

for contributions to over-the-air testing of massive MIMO systems and development of over-the-air measurement systems

Gonzalo Seco-Granados

for contributions to signal processing for global navigation satellite systems, and 5G localization systems

FELLOW RECOGNITION

VTS CLASS OF 2023 IEEE FELLOWS

Houbing Song

for contributions to big data analytics and integration of AI with Internet of Things

Olav Tirkkonen

for contributions in the theory and practice of wireless communications technology and standards

Xin Wang

for outstanding contributions to wireless localization and dynamic resource allocation in broadband mobile networks

Kaishun Wu

for contributions to wireless sensing and ubiquitous computing

Kun Yang

for contributions to resource management in wireless networks

Quan Yu

for technical leadership in radio and space-air-ground integrated network technologies

Shui Yu

for contributions to cyber security and privacy

Haijun Zhang

for contributions to radio-resource management in heterogeneous networks

Youmin Zhang

for contributions to fault diagnosis and fault-tolerant control systems

Zibin Zheng

for contributions to blockchain reliability engineering

Yongxing Zhou

for contributions to MIMO Beamforming codebooks and smart spectrum access in wireless networks

Haojin Zhu

for contributions to Vehicular Networks and Internet-of-Things Security

Shucheng Yu

for contributions to information and network security

Thank you
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