

IEEE

**VTS**

*Connecting the Mobile World*

**2022**

**Awards Program**

**Gordon Stüber,**  
Chair, VTS Awards Committee

# AWARDS

## THE VEHICULAR TECHNOLOGY CONFERENCE AWARD

For exemplary contributions to the success of the 2022 IEEE 96<sup>th</sup> Vehicular Technology Conference, VTC2022–Fall.

General Chairs

**Geoffrey Li, Jianhua Lu, Lajos Hanzo**

## VEHICULAR TECHNOLOGY CONFERENCE 2022 FALL BEST PAPER AWARDS

### BEST VTC2022–FALL PAPERS (REGULAR)

**Sha Hu, Hao Wang**

for the paper entitled, “Approximate Noise-Whitening in MIMO Detection via Banded-Inverse Extension”

**Akio Ikami, Yu Tsukamoto, Naoki Aihara, Takahide Murakami, Hiroyuki Shinbo**

for the paper entitled, “Interference Suppression for Distributed CPU Deployments in Cell-Free Massive MIMO”

**Minh-Thuyen Thi, Sosthène Guédon, Siwar Ben Hadj Said, Michael Boc, David Miras, Jean-Baptiste Dore, Marc Laugeois, Xavier Popon, Benoît Miscopein**

for the paper entitled, “IEEE 802.1 TSN Time Synchronization over Wi-Fi and 5G Mobile Networks”

### BEST VTC2022–FALL PAPERS (STUDENT)

**Dileepa Marasinghe, Nandana Rajatheva, Sami Hakola, Timo Koskela, Oskari Tervo, Juha Karjalainen, Esa Tirola, Jari Hulkkonen**

for the paper entitled, “LiDAR aided Wireless Networks – Beam Prediction for 5G”

**Ruotong Xu, Chenhao Qi, Kangjian Chen**

for the paper entitled, “Parameter Estimation and Beam Tracking in Integrated Sensing and Communication System”

**Zhaolin Wang, Xidong Mu, Yuanwei Liu**

for the paper entitled, “STARS Enabled Integrated Sensing and Communications: A CRB Optimization Perspective”

## VEHICULAR TECHNOLOGY SOCIETY BEST PAPERS AWARDS

### 2022 JACK NEUBAUER MEMORIAL AWARD

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

**Tuyen X. Tran, Dario Pompili**

for the paper entitled “Joint Task Offloading and Resource Allocation for Multi-Server Mobile-Edge Computing Networks,” IEEE Transactions on Vehicular Technology, Vol. 68, No. 1, pp. 856–868, January 2019.

### 2022 BEST LAND TRANSPORTATION PAPER AWARD

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

**Jlawen Kang, Zehui Xiong, Dusit Tao Niyato, Dongdong Ye, Dong In Kim, Jun Zhao**

for the paper entitled “Toward secure blockchain-enabled internet of vehicles: Optimizing consensus management using reputation and contract theory,” IEEE Transactions on Vehicular Technology, Vol. 68, No. 3, pp. 2906–2920, March 2019.

### 2022 NEAL SHEPHERD MEMORIAL BEST PROPAGATION AWARD

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

**Ke Guan, Guangkai Li, Thomas Kürner, Andreas Molisch, Bile Peng, Ruisi He, Bing Hui, Junhyeong Kim, Zhangdui Zhong**

for the paper entitled “On Millimeter Wave and THz Mobile Radio Channel for Smart Rail Mobility,” IEEE Transactions on Vehicular Technology, Vol. 66, No. 7, pp. 5658–5674, July 2017.

### 2022 BEST VEHICULAR ELECTRONICS PAPER AWARD

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

**Preeti Kumari, Junil Choi, Nuria González-Prelcic, Robert W. Heath Jr.**

for the paper entitled “IEEE 802.11ad-Based Radar: An Approach to Joint Vehicular Communication-Radar System,” IEEE Transactions on Vehicular Technology, Vol. 67, No. 4, pp. 3012–3027, April 2018.

### 2022 BEST MAGAZINE PAPER AWARD

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

**Gerhard P. Fettweis**

for the paper entitled “The Tactile Internet: Applications and Challenges,” IEEE Vehicular Technology Magazine, Vol. 9, No. 1, pp. 64–70, March 2014.

### AWARDS RECOGNIZING THE ACCOMPLISHMENTS OF GROUPS

#### VTS CHAPTER OF THE YEAR AWARD

Recognizes the outstanding Vehicular Technology Society Chapter

#### Swedish Section Joint Chapter

##### Chapter Chair

##### Michael Lentmaier

Lund University, Sweden

### 2022 JAMES EVANS AVANT GARDE AWARD



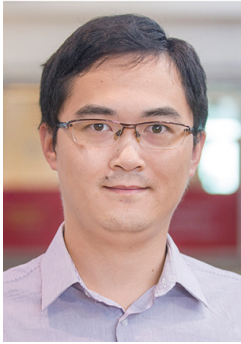
#### Moe Z. Win

Massachusetts Institute of Technology (MIT), USA

for contributions to theory and practice of wireless communication and localization networks

Moe Z. Win (Fellow, IEEE) is a Professor at the Massachusetts Institute of Technology (MIT) and the Founding Director of the Wireless Information and Network Sciences Laboratory. Prior to joining MIT, he was with AT&T Research Laboratories and with NASA Jet Propulsion Laboratory. His research encompasses fundamental theories, algorithm design, and network experimentation for a broad range of real-world problems. His current research topics include ultra-wideband systems, network localization and navigation, network interference exploitation, and quantum information science. He has served the IEEE Communications Society as an Elected Member-at-Large on the Board of Governors, as elected Chair of the Radio Communications Committee, and as an IEEE Distinguished Lecturer. Over the last two decades, he held various editorial positions for IEEE journals and organized numerous international conferences. Recently, he has served on the SIAM Diversity Advisory Committee. Dr. Win is an elected Fellow of the AAAS, the EURASIP, and the IET. He was honored with two IEEE Technical Field Awards: the IEEE Kiyo Tomiyasu Award (2011) and the IEEE Eric E. Sumner Award (2006, jointly with R. A. Scholtz). His publications, coauthored with students and colleagues, have received several awards. Other recognitions include the IEEE Communications Society Edwin H. Armstrong Achievement Award (2016), the Cristoforo Colombo International Prize for Communications (2013), the Copernicus Fellowship (2011) and the Laurea Honoris Causa (2008) from the Università degli Studi di Ferrara, and the U.S. Presidential Early Career Award for Scientists and Engineers (2004). He is an ISI Highly Cited Researcher.

### 2022 EARLY CAREER AWARD



#### **Jianbing Ni**

Queen's University, Kingston, Ontario, Canada

**for contributions to vehicular network security and privacy preservation**

Jianbing Ni (M'18) received the Ph.D. degree in Electrical and Computer Engineering from University of Waterloo, Waterloo, Canada, in 2018, and received the B.E. degree and the M.S. degree from the University of Electronic Science and Technology of China, Chengdu, China, in 2011 and 2014, respectively. He is currently an Assistant Professor with the Department

of Electrical and Computer Engineering and the Ingenuity Labs Research Institute, Queen's University, Kingston, ON, Canada. His current research interests include applied cryptography and network security, with a focus on cloud computing, smart grid, mobile crowdsensing, and the Internet of Things.

### 2022 WOMEN'S DISTINGUISHED CAREER AWARD



#### **Sonia Aïssa**

INRS, University of Quebec, Canada

**for outstanding contributions to spectrum-sharing and cooperative communications, leadership in women-in-engineering and service to the wireless community**

Sonia Aïssa (Fellow, IEEE) received the Ph.D. degree in electrical and computer engineering from McGill University, Montreal, QC, Canada, in 1998. Since then, she has been with the Institut National de la Recherche Scientifique (INRS), Montreal, where she is a Full Professor. During

her career in telecommunications, she has held various research posts in Canada, Japan, Malaysia, and the U.K. Her research interests include the modeling, design and performance evaluation of wireless communication systems and networks, and wireless power technologies. She is a Fellow of the Canadian Academy of Engineering. Her awards include the NSERC University Faculty Award 1999; the Quebec Government FRQNT Strategic Faculty Fellowship 2001–2006; the INRS Performance Award multiple times, for outstanding achievements in research, teaching and outreach; the 2007 FRQNT-SYTACom Technical Community Service Award; the 2021 IEEE WICE Outstanding Achievement Award; and the 2022 IEEE VTS Women's Distinguished Career Award. She was a recipient of multiple IEEE Best Paper Awards and the 2012 IEICE Best Paper Award; and recipient of NSERC Discovery Accelerator Supplement Award. She was a Distinguished Lecturer of the IEEE Communications Society (ComSoc) 2013–2016. She has an outstanding record of service to the IEEE, and serves regularly on many of its committees. She was a Member-At-Large of ComSoc's Board of Governors 2014–2016. Her editorial activities include: Area Editor, IEEE Transactions on Wireless Communications 2014–2019; Editor, IEEE Transactions on Wireless Communications 2004–2012; Associate Editor and Technical Editor, IEEE Communications Magazine 2004–2015; and Technical Editor, IEEE Wireless Communications Magazine 2006–2010. She currently serves as Editor-At-Large for the IEEE Transactions on Communications and as Editorial Board Member for IEEE Access. She has been involved in organizing many flagship conferences of the IEEE, including the 2021 IEEE International Conference on Communications for which she served as the TPC Chair. She is active in promoting women in engineering and is the Founder of the IEEE Women in Engineering Affinity Group in Montreal.



### 2022 OUTSTANDING SERVICE AWARD



#### **Nei Kato**

Tohoku University, Japan

for exemplary service and leadership as Editor-in-Chief (2018-2021) of the IEEE Transactions on Vehicular Technology

### 2022 STUART F. MEYER MEMORIAL AWARD



#### **Robert Schober**

Friedrich-Alexander University Erlangen-Nurnberg (FAU), Germany

for contributions to the analysis and design of wireless communication systems and for exemplary service in VTC organizations

Robert Schober (S'98, M'01, SM'08, F'10) received the Diplom (Univ.) and the Ph.D. degrees in electrical engineering from Friedrich-Alexander University of Erlangen-Nuremberg (FAU), Germany, in 1997 and 2000, respectively. From 2002 to 2011, he was a Professor and Canada

Research Chair at the University of British Columbia (UBC), Vancouver, Canada. Since January 2012 he is an Alexander von Humboldt Professor and the Chair for Digital Communication at FAU. His research interests fall into the broad areas of Communication Theory, Wireless and Molecular Communications, and Statistical Signal Processing. Robert received several awards for his work including the 2002 Heinz Maier Leibnitz Award of the German Science Foundation (DFG), the 2004 Innovations Award of the Vodafone Foundation for Research in Mobile Communications, a 2006 UBC Killam Research Prize, a 2007 Wilhelm Friedrich Bessel Research Award of the Alexander von Humboldt Foundation, the 2008 Charles McDowell Award for Excellence in Research from UBC, a 2011 Alexander von Humboldt Professorship, a 2012 NSERC E.W.R. Stacie Fellowship, a 2017 Wireless Communications Recognition Award by the IEEE Wireless Communications Technical Committee, and the 2021 ACM NanoCom Milestone Award for "fundamental contributions to the modelling, design, and analysis of molecular communication systems". Since 2017, he has been listed as a Highly Cited Researcher by the Web of Science. Robert is a Fellow of the Canadian Academy of Engineering, a Fellow of the Engineering Institute of Canada, and a Member of the German National Academy of Science and Engineering. He served as Editor-in-Chief of the IEEE Transactions on Communications from 2012 to 2015 and as VP Publications of the IEEE Communication Society (ComSoc) in 2020 and 2021. Currently, he serves as Member of the Editorial Board of the Proceedings of the IEEE, as Member at Large of the ComSoc Board of Governors, and as ComSoc Treasurer.

### DANIEL E. NOBLE FELLOWSHIP AWARD



**Hongyang Du**

Nanyang Technological University, Singapore

for outstanding research contributions to intelligent and connected transportation systems

### IEEE TRANSPORTATION ELECTRONICS FELLOWSHIP



**Jin Xie**

University of Electronic Science and Technology of China

for outstanding research contributions to blockchain in vehicular communications and intelligent transportation systems

### VTS CLASS OF 2022 IEEE FELLOWS

**Abdolhosein Nasiri**

for contributions to high power converters for energy storage systems and microgrids

**Andrea Conti**

for contributions to wireless communication and localization systems

**Babak Nahid-mobarakeh**

for contributions to service continuity of electric motor drive systems

**Bo Ai**

for contributions to channel modeling and wireless communications in high-speed railways

**Bulent Sarlioglu**

for applications of electrical drives in the aerospace industry

**Daniel Abramovitch**

for contributions to the development of algorithms for control of mechatronic systems

**Daniel Hissel**

for contributions to the development of hydrogen-energy systems and their industrial applications

**Florian Solzbacher**

for the development of tools enabling applied and translational neuroscience and neural engineering

**Hariharan Krishnan**

for contributions and leadership to vehicle-to-everything communications and applications for vehicle safety

### VTS CLASS OF 2022 IEEE FELLOWS

**Ping Wang**

for contributions to radio resource allocation and performance modeling of heterogeneous wireless networks

**Sinem Coleri**

for contributions to wireless technologies and sensor networks

**Sudip Misra**

for contributions to intelligent sensing in constrained IoT environments

**Trung Q. Duong**

for contributions to cooperative communications and physical layer security

**Xiang Cheng**

for contributions to vehicular communication channel modeling and system design

**Xiaoming Fu**

for contributions to resource management in edge computing and networking

**Yusheng Ji**

for contribution to distributed computing in mobile and dynamic systems

**Zhangdui Zhong**

for contributions to theory, technology and development of mobile communications for railways

Thank you  
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