

# Mobile & Wireless Networks Symposium

#### Co-Chairs

- Sidi Mohamed Senouci, France, Sidi-Mohammed.Senouci@u-bourgogne.fr
- Xiaolan Liu, UK, Xiaolan.Liu@lboro.ac.uk
- Soufiene Djahel, Coventry University, UK, ae3095@coventry.ac.uk
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# **Scope and Motivation**

The Mobile and Wireless Networking Symposium aims to serve as an international forum for experts, researchers, and practitioners from academia, industry, and government to exchange new ideas and results on research and development, as well as to promote and accelerate standardization, applications, and services of current and future wireless networks. This symposium invites contributions and participation from academic and industry researchers in wireless networking technologies, services, architectures, and protocols. The overall goal is to present the latest snapshot of the ongoing research, as well as to shed further light on future directions in mobile and wireless networking systems. Authors are invited to submit papers presenting novel technical studies and position and vision papers comprising hypothetical/speculative scenarios.

# **Topics of Interest**

The Mobile and Wireless Networks Symposium seeks original contributions in the following topical areas, plus others that are not explicitly listed but are closely related to mobile and wireless networks:

- 5G/6G networks and beyond
- · Reconfigurable wireless networks
- Integration of terrestrial and non-terrestrial networks
- User cooperation and incentive techniques in wireless networks
- Small cell networks
- · Vehicular wireless networks
- UAV networks
- Underwater wireless networks
- · Delay-tolerant wireless networks
- Software-defined wireless networks
- · Wireless multimedia networks
- mmWave and Terahertz wireless networks
- Free-space optical networks
- · Opportunistic wireless networks
- Network slicing on wireless networks
- Inter-networking of wireless heterogeneous networks

- Energy harvesting and self-sustainable networks
- Dual-powered cellular networks
- Green mobile and wireless networks
- Artificial Intelligence (AI)/Machine Learning (ML)-based wireless networking technologies
- Digital twin networking for Mobile and Wireless Networks
- Network optimization and QoS enhancement
- · Wireless network virtualization technologies
- Wireless edge computing, fog computing, and cloud computing
- · Pervasive and wearable computing and networking technologies
- WLAN, WPAN, and other home/personal networking technologies
- · Coexistence of heterogeneous wireless networks
- Device-to-device and machine-to-machine communications
- Cell-free wireless networks
- Network architectural design
- · Medium access control
- Routing and path selection
- Flow and congestion control
- · Fault-tolerance and traffic engineering
- Mobility management
- Resource management
- Power management
- · Cross-layer design and optimization
- · Fault-tolerance and reliability testbeds and deployment of wireless networks
- · Standardization activities of emerging wireless technologies
- Fixed/mobile network convergence
- New simulation tools and pilot studies for wireless networks

## **Biographies of the Co-Chairs**

Sidi Mohammed Senouci is a Professor at the university of Bourgogne in France and director of the DRIVE laboratory part of the University of Bourgogne. Dr Senouci received his Ph.D. in Computer Science in 2003 from the University of Paris 6 and his HDR from INP Toulouse, France. From December 2004 to August 2010, he was researcher in Orange Labs. He participated or still participates to several national and European-wide research projects. His research interests include interests include Intelligent transportation systems, wireless and vehicular communications, Security, Machine learning, Intrusion detection systems, Optimization and Performance evaluation. He holds 8 international patents has cowritten with students and colleagues almost 300 articles in top-tier journals, in proceedings of flagship conferences, and book chapters. He has chaired conferences or served as a symposium co-chair for conferences including IEEE ICC'2012, IEEE ICC'2017. He was the Chair of IEEE ComSoc IIN Technical Committee, TCIIN (2014-2016). He is also a Senior Expert in the societies IEEE and SEE (Society of Electricity and Electronics).

**Xiaolan Liu** is a lecturer (assistant professor) in Institute of Digital Technologies at Loughborough University in the London campus. She is also a visiting research scholar at King's College London (KCL) and The Hong Kong University of Science and Technology (HKUST). She received her PhD degree in Computer Science from Queen Mary University of London (QMUL) in July 2021. She was a research associate in KCL from August 2020 to July 2021. Her current research interests include distributed learning for wireless communications, reinforcement learning in edge computing, and privacy-preserving machine learning. She has published more than 30 Journal and Conference papers in these areas with H-index of 15. She is the editor for IEEE Wireless Communication Letters, IEEE Journal Internet of Things, and China Communications, she serves as the symposium co-chair for IEEE ICCT'2023.

**Soufiene Djahel** is a Professor in the Centre for Future Transport and Cities (CFTC) at Coventry University (UK). He holds a Ph.D. degree (2010) from USTL (FR), a Magister degree (2007 - Distinction) from UAMB (DZ) and a State Engineering degree (2004 - Distinction) from UBMA (DZ). His previous appointments include Senior Lecturer in Cyber Security then Reader in Connected and Autonomous Systems at the University of Huddersfield (UK), Senior Lecturer in Computer Science at Manchester Metropolitan University (UK), and Engineering Research Manager at University College Dublin (IE). His research interests include the design and evaluation of communication, planning, optimization and security algorithms and techniques to unlock the potential of emerging wireless connected and autonomous systems, such as CAVs and UAVs, in enabling smarter, safer, and more sustainable cities. His research

was supported by the Newton Fund, JSPS, EPSRC DTP, the Transport Systems Catapult, and the industry. He is the recipient of the FY2021 JSPS Invitational Fellowship for Research in Japan award from the Japan Society for the Promotion of Science.

Ayman Kayssi is a Professor in the Department of Electrical and Computer Engineering (ECE) at the American University of Beirut (AUB) in Beirut, Lebanon. He studied electrical engineering and received the BE degree, with distinction, in 1987 from AUB, and the MSE and PhD degrees from the University of Michigan, Ann Arbor, in 1989 and 1993, respectively. He received the Academic Excellence Award of the AUB Alumni Association in 1987. In 1999-2000, he took a leave of absence and joined Transmog Inc. as chief technology officer. From 2004 to 2007, he served as chairman of the AUB ECE Department, and between 2016 and 2020 he served as associate dean of the AUB Maroun Semaan Faculty of Engineering and Architecture. He teaches courses in electronics and in networking, and has received AUB's Teaching Excellence Award in 2003. His current research interests are in information security and privacy, artificial intelligence, and networking. He has published articles in the areas of VLSI, networking, security & privacy, AI, and engineering education. He co-founded two companies (SAUGO 360 and Healtech) and is a senior member of IEEE and a member of ACM, ISOC, and OEA.

## **How to Submit a Paper**

All papers for technical symposia should be submitted via EDAS. Full instructions on how to submit papers and important deadlines are posted at https://icc2025.ieee-icc.org/

The authors of selected papers from this symposium will be invited to submit an extended version of their work for fast-track review and possible publication in the IEEE Open Journal of the Communications Society.