

# Call for papers

## Signal Processing for Communications Symposium (SPC)

IEEE ICNC 2024

Big Island, Hawaii, USA, Feb 19-22, 2023

<http://www.conf-icnc.org/2024>

### Symposium Co-Chairs

Jingxian Wu, University of Arkansas, USA ([wuj@uark.edu](mailto:wuj@uark.edu))

Tomoaki Ohtsuki, Keio University, Japan ([ohtsuki@keio.jp](mailto:ohtsuki@keio.jp))

Ana Garcia Armada, Universidad Carlos III de Madrid, Spain ([anagar@ing.uc3m.es](mailto:anagar@ing.uc3m.es))

### Scope

The Signal Processing for Communications Symposium focuses on topics related to methodologies, theories, performance analysis and implementations of signal processing applied to communication systems. Of special interest are those signal processing techniques and applications that will facilitate new frontiers in communications, including ultra-massive MIMO, Terahertz communications, and 6G communications. To ensure complete coverage of the advances in this field, the symposium solicits original contributions in, but not limited to, the following topical areas:

- Channel modeling, estimation, and equalization
- Adaptive antennas and beamforming
- Signal detection and synchronization
- Faster-than-Nyquist signaling
- Compressive sensing techniques
- Millimeter-wave and Terahertz communications
- Cognitive radio and software defined radio
- Modulation, coding, and diversity techniques
- Underwater, underground, and space communications
- Massive MIMO, Ultra-massive MIMO Systems
- Massive random access
- OFDM, OTFS and multi-carrier systems
- Non-Orthogonal Multiple Access (NOMA), Rate-splitting
- Resource allocation and cross-layer design
- Localization and position techniques
- Signal processing techniques for machine learning (ML) and artificial intelligence (AI)
- Signal processing techniques for green communications and energy harvesting
- Signal processing techniques for smart-grid communications
- Signal processing techniques for security and cryptography
- Signal Processing Techniques for 6G communications and beyond

### Submission Guidelines

Perspective authors should follow the instructions at <http://www.conf-icnc.org/2024/author.htm> to prepare their manuscripts. All papers should be submitted via EDAS. Submission information can be found at <http://www.conf-icnc.org/2024/cfp.htm>.

## **Short Biographies of Co-Chairs**

### **Jingxian Wu**

Jingxian Wu is currently a Professor with the Department of Electrical Engineering, University of Arkansas, Fayetteville. His research interests mainly focus on signal processing for large scale networks and wireless communications, cybersecurity for smart grids, and statistical data analytics, etc. He served as symposium or track co-chairs for a number of international conferences, such as the 2012 and 2019 IEEE International Conference on Communications, the 2009, 2015, and 2017 IEEE Global Telecommunications Conference, etc. He served as an Associate Editor of the IEEE TRANSACTIONS ON VEHICULAR TECHNOLOGY from 2007 to 2011 an Editor of the IEEE TRANSACTIONS ON WIRELESS COMMUNICATIONS from 2011 to 2016, and is now serving as an Associate Editor of the IEEE VEHICULAR TECHNOLOGY MAGAZINE and the IEEE ACCESS.

### **Tomoaki Ohtsuki**

Tomoaki Ohtsuki is currently a Professor with the Department of Information and Computer Science, Keio University, Japan. His research interests mainly focus on wireless communications, optical communications, signal processing, and information theory. He is a recipient of the 1997 Inoue Research Award for Young Scientist, the 1997 Hiroshi Ando Memorial Young Engineering Award, Ericsson Young Scientist Award 2000, 2002 Funai Information and Science Award for Young Scientist, IEEE the 1st Asia-Pacific Young Researcher Award 2001, the 5th International Communication Foundation (ICF) Research Award, 2011 IEEE SPCE Outstanding Service Award, the 27<sup>th</sup> TELECOM System Technology Award, ETRI Journal's 2012 Best Reviewer Award, 9th International Conference on Communications and Networking in China 2014 (CHINACOM '14) Best Paper Award, 2020 Yagami Award, and The 26th Asia-Pacific Conference on Communications (APCC2021) Best Paper Award. He has published more than 250 journal papers and 480 international conference papers.

He served as a Chair of IEEE Communications Society, Signal Processing for Communications and Electronics Technical Committee. He served as a technical editor of the IEEE Wireless Communications Magazine and an editor of Elsevier Physical Communications. He is now serving as an Area Editor of the IEEE Transactions on Vehicular Technology and an editor of the IEEE Communications Surveys and Tutorials. He is also serving as the IEEE Communications Society, Asia Pacific Board Director. He has served as general-co chair, symposium co-chair, and TPC co-chair of many conferences, including IEEE GLOBECOM and ICC. He gave tutorials and keynote speeches at many international conferences including IEEE VTC, IEEE PIMRC, IEEE WCNC, and so on. He was Vice President and President of the Communications Society of the IEICE. He is a senior member and a distinguished lecturer of the IEEE, a fellow of the IEICE, and a member of the Engineering Academy of Japan.

### **Ana García Armada**

Ana García Armada is currently a Professor at UC3M, Spain, where she has served in a variety of management positions (Head of Signal Theory and Communications Department, Vice-dean of Electrical Engineering, Deputy Vice-Chancellor of International Relations, among others). She is leading the Communications Research Group at this university. She has been visiting scholar at Stanford University, Bell Labs and University of Southampton. She has published more than 250 papers in international journals and conference proceedings and she holds five granted patents. She is serving on the editorial board of IEEE Transactions on Communications, IEEE Open Journal of the Communications Society and ITU Journal on Future and Evolving

Technologies. She has been a member of the organizing committee of IEEE Globecom 2022, IEEE Globecom 2021 (General Chair), IEEE Globecom 2019, IEEE Vehicular Technology Conference (VTC) Fall 2018, Spring 2018 and 2019 and IEEE 5G Summit 2017, among others. She has been a Member at Large of the Board of Governors, Director of Online Content and member of several management committees in the IEEE Communications Society, where she is now the VP of Member and Global Activities. She was awarded the third place Bell Labs Prize 2014 for shaping the future of information and communications technology. She received the IEEE ComSoc/KICS Exemplary Global Service Award in 2022.