

Call for Papers

Signal Processing for Communications Symposium (SPC)

Big Island, Hawaii, USA, Feb 17-20, 2020

<http://www.conf-icnc.org/2020/>

Symposium Co-chairs

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Scope

The focus of Signal Processing for Communications Symposium is on topics related to algorithmic, analytical, and implementation aspects within signal processing for communication systems. Of special interests are signal processing methodologies, theories, performance analysis and implementations of communication systems and applications to new frontiers including massive MIMO, smart grid, and 5G communications. To ensure complete coverage of the advances in this field, the Signal Processing for Communications Symposium solicits original contributions in, but not limited to, the following topical areas:

- Channel modeling, estimation, and equalization
- Adaptive antennas and beamforming
- Space-time coding and processing
- Signal detection and synchronization
- Faster-than-Nyquist signaling
- Compressive sensing techniques
- Transmitter and receiver techniques
- Millimeter-wave communications
- Cognitive radio and software defined radio
- Modulation, coding, and diversity techniques
- Ultra-wideband (UWB) communications
- Underwater acoustic communications
- SISO, SIMO, MISO, MIMO, and Massive MIMO Systems
- Massive Random Access
- OFDM and multi-carrier systems
- CDMA, TDMA, FDMA, LTE
- Non-Orthogonal Multiple Access (NOMA)
- Localization and position techniques
- Signal processing techniques for cooperative networks
- Signal processing techniques for green communications and energy harvesting.
- Signal processing techniques for power-line communications
- Signal processing techniques for security and cryptography
- Signal Processing Techniques for 5G communications and beyond
- Advanced signal processing modules for smart grid
- Resource allocation techniques, mathematical optimizations and game theory.
- Machine learning for signal processing

- Machine learning/Deep learning for wireless communications
- Communications test-bed development

Submission Guidelines

Please follow the author instructions at <http://www.conf-icnc.org/2020/author.htm>. Direct paper submission for this symposium can be found at <http://www.conf-icnc.org/2020/cfp.htm>.

Short biography of co-chairs

Feifei Gao is an Associate Professor of the Department of Automation, Tsinghua University, Beijing, China. Prof. Gao's research areas include communication theory, signal processing for communications, array signal processing, convex optimizations and machine learning technologies, with their applications in MIMO communications, multi-carrier communications, cooperative communication, and cognitive radio networks. Prof. Gao has served as an editor of IEEE Transactions on Wireless Communications, IEEE Transactions on Cognitive Communications and Networking, IEEE Signal Processing Letters, IEEE Communications Letters, IEEE Wireless Communications Letters, International Journal on Antennas and Propagations, and China Communications. He has also served as the symposium co-chair for 2019 IEEE Conference on Communications (ICC), 2018 IEEE Vehicular Technology Conference Spring (VTC), 2015 IEEE Conference on Communications (ICC), 2014 IEEE Global Communications Conference (GLOBECOM), 2014 IEEE Vehicular Technology Conference Fall (VTC).

Michalis Matthaiou is currently a Reader (equivalent to Associate Professor) in Multiple-Antenna Systems at ECIT Institute, Queen's University Belfast, U.K. after holding an Assistant Professor position at Chalmers University of Technology, Sweden. His research interests span signal processing for wireless communications, massive MIMO systems, hardware-constrained communications, fog computing and performance analysis of fading channels. He has published in excess of 170 papers on these topics, including some 70 IEEE journal papers. Dr. Matthaiou and his coauthors received the IEEE Communications Society (ComSoc) Leonard G. Abraham Prize in 2017. He is currently awarded the prestigious 2018/2019 Royal Academy of Engineering/The Leverhulme Trust Senior Research Fellowship and the 2019 EURASIP Early Career Award. His team was also the Grand Winner of the 2019 Mobile World Congress Challenge. He was the recipient of the 2011 IEEE ComSoc Best Young Researcher Award for the Europe, Middle East and Africa Region and a co-recipient of the 2006 IEEE Communications Chapter Project Prize for the best M.Sc. dissertation in the area of communications. He has co-authored papers that received best paper awards at the 2018 IEEE WCSP and 2014 IEEE ICC and was an Exemplary Reviewer for IEEE Communications Letters for 2010. In 2014, he received the Research Fund for International Young Scientists from the National Natural Science Foundation of China. He has been a member of Technical Program Committees for several IEEE conferences such as ICC, GLOBECOM, WCNC etc. In the past, he was an Associate Editor for the IEEE Transactions on Communications, Associate Editor/Senior Editor for IEEE Communications Letters and was the Lead Guest Editor of the special issue on "Large-scale multiple antenna wireless systems" of the IEEE Journal on Selected Areas in Communications. He is a Senior IEEE member.